PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

PROVINCE OF ASSAM

FOR THE YEAR

1883-84.

By GUSTAV MANN,
CONSERVATOR OF FORESTS, ASSAM.

SHILLONG
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1884.

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FROM GUSTAV MANN, ESQ.,

Conservator of Forests, Assam,

TO THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Dated Shillong, the 24th June 1884.

SIR,

I HAVE the honour to submit the Annual Forest Administration Report for this Province for the year 1883-84.

2. The report has been made as short as possible without omitting any essential information, and statistics have been recorded in appendices in accordance with the wishes of the Chief Commissioner.

I have the honour to be,

SIR,

Your most obedient Servant,

GUSTAV MANN,

Conservator of Forests, Assam.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN ASSAM

For the year 1883-84.

By GUSTAV MANN,

Conservator of Forests, Assam.

INTRODUCTION.

The organisation of the Forest Department in Assam has remained unchanged during the year, but a great improvement took place in the control over the district forests in the Province, in consequence of the placing of mauzadars under the direct orders of the District Forest Officers as regards forest work, and the establishment of a sound system of granting licenses for the removal of forest produce from these forests.

2. The Chief Commissioner's orders regarding the management of district forests, and the rules regulating the removal of forest produce from them, were circulated in English as well as in Assamese in the Valley districts, and the rules for district forests in Sylhet and Cachar were circulated in English and Bengali in the Surma Valley, so that people are becoming well acquainted with them.

3. Similar rules were sanctioned by the Chief Commissioner for part of the Jaintia Hills, and others for the protected forests in Cachar and Sylhet, and also for the North Cachar Hills.

4. In the Gáro Hills an area of 79½ square miles of valuable forests, mostly Sâl, has been gazetted during the year as Government reserved forests under the Indian Forest Act, and their maintenance is thus ensured.

5. The efficient keeping of the boundaries of existing reserves has received proper attention in all the divisions, rendering encroachments by jhúming from ignorance impossible.

6. Road-work and buildings have been pushed on in all divisions as far as funds permitted, and fire-protection has, with the exception of the Goálpára division, been successful during the year.

7. Plantation work in the Darrang district, and the further experimental tappings of Caoutchouc-trees, to ascertain their yield, has been somewhat interfered with by the Aka disturbance, but efforts are being made to make up for this now.

8. The yield of the forests has not been equal to that of the previous year, as the timber trade was very dull, and the financial results are in consequence less favourable, but endeavours are being made to make several valuable forests in the Gáro Hills which have not been worked hitherto accessible by the construction of roads, and favourable offers for the trees in these forests have already been received, so that better results may be expected in the current year.

CHAPTER I.

AREA AND BOUNDARIES.

Area of reserved forests.

9. The additions to the area of reserved forests made during the year under report are enumerated in the following statement, and amount to a total increase of 137·58 square miles:—

Name of district.	Name of mauza.	Name of forest.	Area in square miles.
Garo Hills ...	Mauza No. 7 ...	Dibru Hill	9·50
	,, ,, 8 ...	Jinari	10·88
	,, ,, 4 ...	Chima and Bangshi	13·56
	,, ,, 4 ...	Dhima	9·00
	,, ,, 4 ...	Dilma	1 75
	,, ,, 4 ...	Rajasimla	7·50
	,, ,, 4 ...	Ildek	2 00
	,, ,, 4 ...	Darugiri	3·57
	,, ,, 5 ...	Rangrengiri	13·25
	,, ,, 1 ...	Emangiri	3 25
	,, ,, 1 ...	Rewak	2·00
	,, ,, 1 ...	Siju	2·00
	,, ,, 3 ...	Bolsolgiri	1·00
	,, ,, 3 ...	Tura...	0 75
Goalpara ...	Duar Sidli ...	Bengtol and Darogaon	11·09
		Bhumeswar Hill	7·15
Kamrup ...	Hajo ...	Hajo	0·85
Sibsagar ...	Noakachari ...	Desai	10·77
	Dibrapar ...		
	Lahing and Ghakirkhoa.	Jhansi	28·71
		Total... ...	137·58

10. The prescribed tabular statement (Form No. 49) attached to this report shows the total areas of reserved forest at the close of the year and the new additions have been described in detail in the register of reserves, Appendix I.

11. The valuable Dambu forest in the Gáro Hills, comprising an area of 7·75 square miles, was not finally gazetted as a reserve under Section 19 of the Forest Act on account of the absence of the Deputy-Commissioner, who was appointed Political Officer with the Aka Expedition, from the district, which prevented his settling with the villagers of Dambu about the amount to be paid in the way of compensation for the removal of their houses; but these people have actually already moved from the forest, which is in every respect taken care of by the forest officials, like those forests which have been finally gazetted as reserves.

12. There are three other valuable forests in the Gáro Hills, the Sangsak, Bagmara, and Bondrapara, extending over an area of about 52 square miles, which have been surveyed and demarcated, and are protected as strictly as reserves; but the final settlement could not be completed during the year, as the Deputy-Commissioner was away from his district, as stated above. These settlements will be made during the current year.

13. In the Goálpára district, the northern boundary of the Bijni Duár forests was fixed by the Deputy-Commissioner in accordance with the orders of the Chief Commissioner and has been demarcated and surveyed during the year, but the report on this work was only received since the close of the year. The necessary proposals for a preliminary gazetting of this forest, in accordance with the procedure prescribed in Section 4 of the Forest Act, have been submitted for the orders of the Chief Commissioner.

14. Nothing could be done regarding the settlement of the addition to the Charduár reserved forest proposed in 1879-80, since the disputes of private persons claiming the land adjoining this forest have not yet been settled. The Darrang Forest Officer has now been instructed to accept as a temporary arrangement the boundaries of the adjoining private estates, as pointed out to him by the people in possession, and to survey them. This will enable the Conservator to make the necessary representation (to the Chief Commissioner) about the final gazetting of this area.

15. The forests proposed as reserves during the year and gazetted as prescribed in Section 4 of the Forest Act, but not finally declared reserved forests under Section 19 of that Act, were the following:—

Name of district.	Name of mauza.	Name of forest.	Area in square miles.
Darrang	Bálipára	Addition to the Charduár reserve.....	9
Sylhet.....	Karimganj	Langai and Singla forests	170
		Total.....	179

16. Proposals to declare certain areas in the North Cachar Hills as protected forests under Section 28 of the Forest Act were submitted by the Conservator, and sanctioned by the Chief Commissioner during the year in notification No. 9, dated the 3rd April 1884, published in the *Assam Gazette* of the 5th April 1884, page 144; they are the following:—

Area of proposed forests.

Name of district.	Name of mauza.	Name of forest.	Area in square miles.
Cachar	North Cachar Hills sub-division	Kopili-Divung forest	304
		Divung-Mati „	88·16
		Mupa-Mahur „	37·12
		Langting-Mupa „	103·04
		Total.....	532·32

In the schedule of Government protected forests, attached to this report as Appendix II., the boundaries of these areas are given.

17. The clearing of any land covered with trees in these forests was prohibited in in Revenue Department Notification No. 8, dated 3rd April 1884, published in the *Assam Gazette* of the 5th April 1884, page 144, which is attached to this report as Appendix III.

18. The only alteration in the area of district forests which has to be recorded is their decrease by about 345 square miles in consequence of the gazetting of reserved and protected forests and the allotment of waste lands as shown in the prescribed tabular statement (Form No. 49) attached to this report.

Area of district forests.

19. The work of demarcating new lands for the purpose of making them Government reserves was proceeded with during the year in the Gáro Hills, Goálpára, Kámrúp, Darrang and Nowgong, and Lakhimpur divisions.

20. The tabular statement attached to this report as Appendix IV. shows the extent of the artificial boundaries which have to be maintained in each reserve and protected forest, how much of this work was accomplished and remained undone, and what proportion of these boundaries had been inspected by the Divisional Officers by the close of the working season and the length of the boundaries not inspected.

The progress in this important work is reported by the Divisional Officers every month, not only for each reserve, but for each separate boundary of the reserve, so that the Conservator is always kept well informed on the subject.

21. The maintenance of these boundaries is of great importance in a country like Assam, where new forest land is often taken up by private persons for tea-cultivation and other purposes, or by semi-civilised races for jhúming, which, together with the extremely luxuriant growth of all vegetation, make a considerable and annually-recurring expenditure on this work absolutely indispensable. During the year under report the latter was Rs. 11,252-1-10, of which the different divisions spent the amounts as shown below:—

	Rs.	A.	P.
Gáro Hills division	1,250	4	6
Goálpára „	330	14	9
Kámrúp „	1,349	13	9
Darrang and Nowgong division	1,035	1	0
Sibságar division	1,112	5	0
Lakhimpur „	5,243	11	4
Cachar „	929	15	6
Total.....	11,252	1	10

22. The sum of Rs. 255 was paid as compensation to the villagers of Bindhima in the Gáro Hills, on account of the removal of 17 houses from the Dhima reserve at the rate of Rs. 15 per house.

23. The changes in areas of forests, and the work done for the maintenance of demarcated boundaries according to divisions were as follows:—

Account of changes in area and boundary work according to divisions.

24. The area of reserved forests in the Gáro Hills at the close of the year was 79½ square miles; these were all newly gazetted during the year under report, and, as already stated, if it had not been for

Garo Hills division.

the absence of the Deputy-Commissioner on special duty in the Áka Hills, an area of about 60 square miles more would have been finally settled.

25. A fair amount of boundary-clearing and repairing of boundary-marks, as well as inspection of boundaries by the Divisional Officer, was accomplished, as will be seen on reference to Appendix IV. of this report, and Mr. Copeland explains that the clearing of the boundaries of the Rangrengiri forest could not be carried out this year, because the people in the neighbourhood had already given a great deal of labour for the construction of the buildings and the stockade of the Rangrengiri outpost, and therefore declined to work any more on payment, as they had to attend to their own cultivation. The Divisional Officer was prevented from inspecting every demarcated boundary by his time having been taken up in opening out a good road from the valuable Dambu forest to the Dudnai river, since double the price, or Rs. 20 per tree, had been offered if this road was made at once.

Goálpára division.

26. The area added to the reserved forests in the Goálpára district was 18 square miles, making the total of reserved forests in this division 456 square miles.

27. In addition to these, the Panbari, Pechadavery, and Bijni Duár forests, aggregating about 192½ square miles, were demarcated and surveyed. Of the latter forest, proposals to declare it a reserve have already been submitted for the orders of the Chief Commissioner since the close of the year, and the Divisional Officer's report regarding the former two is expected shortly. It is hoped all of these forests will be finally gazetted as reserves during the current year.

28. Reference to Appendix IV. of this report will show that out of a total length of 99 miles of demarcated boundaries of reserved forests, the Divisional Officer inspected 79½ miles, and that 86 miles of boundaries were cleared whilst 13 miles remained uncleared, and out of 383 boundary marks 327 were repaired and 56 not. This is an improvement on the work done in the previous year, and the Conservator hopes that in the current year nothing of this important work will remain undone.

Kámrúp division.

29. The only addition to the area of reserved forests in the Kámrúp division was the Hajo forest, measuring 226 acres. The total area of reserves in the Kámrúp division is now 121 square miles, and of protected forests 3 square miles No change took place in the area of the latter during the year.

30. The clearing of demarcated boundaries, and repairing of boundary-marks on the same, is particularly extensive in the Kámrúp division, but has been well attended to in every respect, as will be seen by a reference to Appendix IV. of this report: the latter shows that out of a total length of 252 miles and 36 chains of demarcated boundary only 18 miles and 57 chains were not inspected by the Divisional Officer, and 6 chains not cleared; and out of 1,657 boundary marks 248 were not repaired this year.

The keeping in good order of the boundary marks at the Mayang and Kawasing Hill reserves is reported by the Divisional Officer as particularly difficult, because wild elephants abound and make the posts and mounds the objects of their frenzy. Mr. Mein is not in favour of other methods of demarcation, but recommends stronger posts and mounds than were put up hitherto.

31. In addition to this, a valuable Sâl forest south of the present Milmillia reserve, extending over an area of about 3 square miles, was surveyed and demarcated, and the necessary report for a preliminary gazetting, in accordance with the procedure prescribed in Section 4 of the Forest Act, was submitted to the Conservator. These proposals will be forwarded for the orders of the Chief Commissioner immediately on receipt of the map, now under preparation.

Darrang and Nowgong division.

32. There was no change in the area of the reserved forests in the Darrang and Nowgong division, but, as already stated, proposals were submitted to have an addition made to the Charduár reserve, extending over about 9 square miles; the Forest Settlement Officer's report about this tract was, however, not received until after the close of the year.

33. Further careful inspection of forests was carried out in the Nowgong district with a view to increase the area, and some of these forests were demarcated and surveyed. Much of the Divisional Officer's time was, however, required in rendering assistance during the Áka Expedition, which prevented his going to the Nowgong district, and attending to the settlement of the boundaries of these forests with the Deputy-Commissioner of that district. There are no protected forests in this division, and a small decrease in the area of district forest by 1,005 acres has been reported by the Divisional Forest Officer, which area was sold in the Darrang district under the Thirty-years' Lease Rules of 1876.

34. The maintenance of demarcated boundaries of reserves in the Darrang and Nowgong division was well attended to. Every part of these boundaries was inspected by the Divisional Officer, and they were all cleared, and boundary-marks repaired where necessary.

In the Deboka reserve eight additional boundary marks were put up and 10 in the Garumari reserve to improve the demarcation of these forests.

35. The average cost of demarcation work, new and old, has been as follows:—

	Rs.	As.	P.	
In the Darrang district	17	5	10	per mile.
" Nowgong "	20	2	11	"

This is high, and the Conservator hopes it will be found possible to reduce this rate of expenditure in future years.

Sibságar division.

36. In the Sibságar forest division two reserves, situated at the foot of the Nága Hills and extending over an area of about 40 square miles, were added to those previously gazetted, making the total area of reserves in this division as follows:—

In the Nága Hills district	487 square miles.
" Sibságar "	94 ditto.

37. The area of the protected forests in this division remained unchanged, and that of the district forests is increased by 486 square miles, consequent on an inspection of the forests in the Majuli, and reduced by the area declared reserved forest, as shown in Form No. 49.

38. Proposals for an additional reserve extending over an area of about 3 square miles in the Thourah mauza in Sibságar district were received by the Conservator from the Divisional Officer, which will shortly be submitted for the orders of the Chief Commissioner.

39. In addition to this, the Divisional Officer made a thorough inspection of all the forests in the Majuli, and submitted an interesting report on the same. The map, showing the distribution of forests, grass lands, and cultivation, is under preparation. When the latter is received, the Conservator hopes to submit his proposals regarding forest management in that part of the Sibságar district for the orders of the Chief Commissioner.

40. The Majuli, a large island formed by two branches of the Brahmaputra, comprises an area of 486 square miles, and is divided into three mauzas, and by far the largest portion of the land is freehold or *lá-khiráj*, held chiefly by Gosains; a small area is half-freehold or *nisf-khiráj*, and the remainder Government or *khiráj* land paying full rent.

The exact proportion of these different descriptions of leased land situated in each mauza is the following:—

Name of mauza	Lakhiráj. Acres.	Nisf-khiráj. Acres.	Khiráj lands. Acres	Total. Acres.
Salmara	31,295·75	20·25	9,844·00	41,160·00
Ahotojuri	165·00	.....	2,926·50	3,091·50
Borgohaichopree	3,790·00	.....	1,979·00	5,769·00
Total	35,250·75	20·25	14,749·50	50,020·50

Deducting the above areas of occupied land from the total area of 311,181 acres, it leaves an area of 261,161 acres of Government waste land, of which Mr. Fordyce estimates 50,000 acres are forest, and the remaining 211,161 acres grass land, with scattered trees on it, with swamps, bhils, and rivers

The forests are reported as inferior mixed plains forests, largely intersected by temporary cultivation or jhúms.

41. The work done in the Sibságar division for maintaining the demarcated boundaries in a state of efficiency is shown in Appendix IV. of this report. The clearing of the southern boundaries of the Desai and Jhansi reserves during the year was found impracticable.

The northern boundary of the Diroi reserve, which is also the boundary between the Sibságar and Lakhimpur districts, was cleared this year for the first time, to make any excuse of trespass impossible. All boundaries of reserved forests in the Sibságar district were, as in former years, cleared, and boundary-marks repaired by contract and the Divisional Officer reports favourably on this method of doing the work, in preference to doing it by daily labour with impressed coolies.

42. The average cost of demarcation work in the Sibságar division has been Rs. 10-4-9 per mile, which is reasonable, considering the great difficulty of obtaining labour in this part of the Province.

Lakhimpur division

43. The forests in the Lakhimpur division remain as yet all protected forests, since absolutely no work was done by Mr. Ludlow whilst he was in charge of this division. His successor, Mr. Barker, submitted proposals regarding the Jokai, Dehingmukh, Upper Dehing, and Parapara forests, extending over an area of 320 square miles, with maps, but they being incomplete and the maps inaccurate, his report had to be returned to him for correction and further explanations. The Conservator hopes to submit the proposals about these forests, together with those regarding the Bharalwah, Kuddum, and Jaipur forests, during the current year for the orders of the Chief Commissioner.

The total area of the protected forests in this division remained unchanged, being 459 square miles, while that of the district forests has been reduced by 1,962 acres, which is the land allotted for cultivation during the year.

44. Nearly all the boundaries of the protected forests were recleared, and the boundary-mounds repaired where necessary, as detailed in Appendix IV. In addition to this work, the tract of land 1½ miles on either side of the railway line through the Upper Dehing forest, which is to be given up for cultivation when applied for, was demarcated for 13 miles 43 chains on both sides of the line, and 53 boundary-posts have been put up on those lines.

45. The inspection work of demarcated boundaries done by the Divisional Officer was 41 miles and 50 chains, out of a total of 109 miles and 53 chains, which is altogether insufficient. Mr. Barker ascribes this omission to inspect all demarcated boundaries to press of other work and want of elephants during the greater part of the working season, which, however, cannot be accepted by the Conservator as a valid excuse, and Mr. Barker has been informed accordingly.

46. The great difficulty of obtaining labour in the Lakhimpur district has induced the Divisional Officer to attempt to get the clearing of boundaries and the repairing of boundary mounds done by contract, but he succeeded only in getting part of the former work done in this way. This is, however, a move in the right direction, and should be persevered in if the cost is not much higher than that of doing the work by daily labour, impressed by order of the Deputy-Commissioner, which is always very unsatisfactory, and necessitates a great loss of time on the part of subordinates.

47. The average cost of new and old demarcation work has been a little under Rs. 49 per mile, which is very excessive, even though allowance be made for the fact that the Railway Company have taken up almost all labour procurable, and paid extraordinary high wages, to push on and complete their works. Explanations have been called for from Mr. Barker.

Cachar division

48. The area of the Government reserved forest in the Cachar division remains unaltered.

49. The area gazetted as protected forests in the North Cachar Hills, including grass land and cultivation, is 532 square miles, and a decrease in the area of district forests, amounting to 211 square miles, situated beyond revenue limits, and not including grass lands and cultivation, has been shown in the tabular statement, Form No. 49, attached to this report in consequence of the gazetting of the protected forests.

50. The forests in the North Cachar Hills are very irregularly distributed and much intersected by land formerly jhúmed and now covered either with grass or secondary growth of arborescent vegetation, besides villages, which latter are not very numerous, yet they are too many to make their removal to other land advisable, although nearly all of them belong to migratory races, while leaving them where they are and declaring the forest around them reserves under the Forest Act would have necessitated an amount of interference with these people that would not have been justified, inasmuch as these forests are not of very great value. Under these circumstances, it was considered preferable to declare the best tracts in the country "protected forests," as the means to give them the requisite amount of conservancy without unduly interfering with jhúming, this being the only method of cultivation at present known and exclusively practised by the people, but prohibiting jhúming on all such land as was still covered with forest and this was accordingly done.

51. All existing demarcated boundaries in the Cachar division were cleared, with the exception of 46 chains in the Sonai reserve; the reason why this short distance has not been cleared is not explained by the Divisional Officer.

The clearing of boundary lines is, for the sake of economy, done to a width of 10 feet only, for two years, and in the third year it is made 20 feet wide. To equalise the expenditure on this work in the different years, as far as can be managed, about one-third of the

reserves have their boundaries cleared to a width of 20 feet every year, and the other two-thirds to a width of 10 feet only.

The boundary-mounds were all repaired where necessary, and as they stood very close on several of the boundaries, some of them have been done away with, to save the expense of repairs, whilst on other boundaries their number has been increased, wherever this was desirable.

52. In this division, as in that of Lakhimpur, the inspection of the boundaries by the Divisional Officer has been altogether insufficient, only 12 out of a total length of 68 miles having been inspected by Mr. Young. His explanation for this short work is that very few of the boundaries can be inspected, except on foot, and that he suffered the greater part of the working season from sore feet, but it does not take many days to walk over 68 miles and the Conservator considers Mr. Young's excuse for this reason as most unsatisfactory.

53. The boundary of the small area of 18 acres near the village of Haitu, reserved for the growth of indigenous tea-seed, has also been recleared, but all specimens received up to date from Mr. Young are not tea, but *Camellia drupifera*.

54. The average expenditure on demarcation work during the financial year in this division has been Rs. 13-9 per mile, which, considering that labour in Cachar is cheaper than in the valley districts, is still somewhat high and Mr. Young has been requested to make every effort to reduce the cost of this work.

Sylhet division

55. The Langai and Singla protected forest in the Sylhet district has, as already stated, been proposed as a reserve, but all land settlement questions in that district take a long time to decide, since the inhabitants are very much given to preferring claims. The final gazetting of this forest is shortly expected, pending which, the area, as now shown in Form 49, has been left unaltered.

The demarcated portion of the northern boundary of this forest is six miles, and has 25 boundary-mounds on it; the clearing of the former and repair of the latter has not been practicable during the year, on account of the khedda operations carried on in this locality, as it would no doubt have driven away the wild elephants.

Khasi and Jaintia Hills division.

56. The Deputy-Commissioner of the district has received from the officer in charge of the Jowai sub-division a report regarding the area near the village of Jowai, which it was intended to make a reserve, but the claims to the right of cultivating within this tract are so very numerous that the Conservator has decided not to submit any proposals regarding it for the orders of the Chief Commissioner, until he has again personally inspected the locality.

57. The boundaries of the Shillong estate and the several smaller areas in the neighbourhood taken up for the growth of forests, were all cleared as fire-lines, and there is no danger of any encroachment taking place.

Naga Hills division

58. No change was made during the year in the area of forest land in the neighbourhood of Kohima in the Nága Hills, which was reserved for the growth of timber and other forest produce.

CHAPTER II.

SURVEYS, WORKING-PLANS, AND PLANS OF OPERATION.

Survey work.

59. Survey work was carried on during the year under report in all the divisions where Forest Officers have been appointed, except Sibságar, chiefly with a view to obtain correct maps of the reserved forests and their boundaries, but also to obtain preliminary maps of such forests which it is intended to propose as reserves or protected forests and other lands the department may wish to acquire, such as depôts, &c., all of which work will be of much value when the time comes for a regular detail survey by the Imperial Forest Survey establishments preparatory to the starting of working plans.

Annual plans of operation.

60. No change has been made in the existing arrangements that Divisional Forest Officers submit proposals regarding the work they recommend to be done during the year in their divisions, according to which and the money available, the Conservator draws up the annual plans of operation at the commencement of the working season for the guidance of Divisional Forest Officers.

Account of survey work according to divisions

61. The survey work done in each division is briefly described below:—

Gáro Hills division.

62. The survey work which was done in the Gáro Hills division is the following:—

(1) Village lands in the Songsak Forest.
(2) Timber depôt at Mornai, on the Dudnai river.
(3) Ditto at Dobapara, on the Jmari river.
(4) Ditto at Lakhipur, on the Jmjiram river.
(5) Ditto at Salmara, ditto ditto.
(6) Ditto at Manikchor, on the Kalu ditto.

Maps of these different lands are under preparation for record in the divisional office and in that of the Conservator.

Goálpara division.

63. In the Goálpára division the following survey work was done:—

Names of forests.	Area.
1. Panbari and Pechadaveri	... 5 square miles.
2. Bengtal and Darogaon	... 11 ,,
3. Bhumeswar Hill	... 7 ,,
Total	... 23 ,,

Maps of these forests on the scale of four inches to one mile are under preparation for the divisional office and that of the Conservator.

In addition to this, the southern boundary of the proposed Bijni reserve, measuring 13¾ miles in length, was surveyed.

64. An attempt was also made by Mr. Jellicoe to ascertain the number of trees or growing material at present existing in the Chirangduár reserve (western part) for guidance in working this forest, and the counting of trees on a square acre in three different localities gave the following results:—

Name of forest.	2′ 6″ and over.	3′ 6″ and over.	4′ 6″ and over.	Other trees.	Remarks.
Tongtongamalli Jhar ...	.....	.....	3	30	Sâl seedlings very scarce. Average height of bole 40 feet, estimated.
Hatsalli Jhar ...	20	6	3	10	Sâl saplings and seedlings plentiful. Average height of bole 30 feet.
Upperdooli Jhar ...	31	11	5	20	Sâl saplings plentiful. Average height of bole 40 feet.
Total ...	51	17	11	60	

These sample countings applied to two-thirds of the whole area of the reserve, or in round figures 60,000 acres, one-third being excluded as consisting of grass land, rivers, and so forth, would give the following amount of growing stock as calculated by Mr. Jellicoe:—

Sâl trees from 2′ 6″ to 3′ 6″ in girth	1,020,000
Ditto from 3′ 6″ to 2′ 6″ ditto	340,000
Ditto more than 4′ 6″ ditto	220,000
Other trees	1,200,000

The Conservator knows from personal observation that there are nothing like the numbers of Sâl-trees above 3 feet 6 inches in girth in the Chirang reserve (western part) and considers the mere application of such limited countings to the whole area, or even two-thirds of it, as extremely misleading, and giving altogether very erroneous results; he would either make valuation surveys very thoroughly or not at all, and, as already stated last year, the present staff is not sufficient to do this important work thoroughly.

Kámrúp division.

65. The survey work done in the Kámrúp division comprised the following:—

Name of forest.	Area.
(1) The Rani reserve	17·29
(2) The Mayang Hill reserve.	7·50
(3) The addition to the Pantan reserve (Duran Block)	19·
(4) The Jharikhuri protected forest	1·92
(5) The Bura Gohain ditto	0·96
(6) The Mogákhal ditto	0·28
Total	46·95

The maps of these surveys for record in the divisional office, and that of the Conservator, are under preparation.

Darrang and Nowgong division.

66. The following table was submitted by the officer in charge of the Darrang and Nowgong division, exhibiting the survey work done during the year under report:—

Name of forest.	Compass.		Plane-table.		Area.
	Distance.	Angles.	Distance.	Angles.	
Kholahát	1,750	181	1,112	109	23,725
Dobóka	1,020	75	200	10	5,200
Diju Valley	709	71	300	18	4,480
Ronkhang	399	10	100	4	1,125
Chappanalla	450	12	109	4	2,740
Bamoni	500	10	.....	.....	1,700
Total ..	4,828	359	1,821	145	38,970

The maps of these surveys are also under preparation.

Sibságar division.

67. No survey work was done in the Sibságar division, as the native surveyor fell ill soon after the season's work had been commenced. Leave was granted him at first, but he resigned soon after on account of ill-health and no other surveyor could be had to take his place before the end of the working season.

Lakhimpur division.

68. In the Lakhimpur division the following survey work was done during the year under report:—

Name of forest.	Area surveyed in square miles.	Length of boundary line.
Kuddum	25	6 miles 60 chains.
Bharalwah	8	1 „ 10 „
Land to be given up for cultivation in Upper Dehing Forest, North,	12	14 „ 43
Ditto ditto ditto South	3	.....
Total	48	27 „ 33 „

Maps on the scale of 4 inches to the mile of those surveys are in course of preparation.

Cachar division.

69. In the Cachar division the following lands allotted for jhúm cultivation to a village in the lower Jiri reserve, and two villages in the Barák reserve, were surveyed to prevent these people jhúming indiscriminately in those forests:—

Lalkham Punji in the Lower Jiri reserve	323 acres.
Naraindhar Punji in the Barák reserve	150 „
Akhai Punji in the ditto ditto	1,568 „
Total	2,041 „

The maps of these surveys are under preparation. In addition to this, seven roads were surveyed, three in the Upper Jiri, one in the lower Jiri, and three in the Barak reserve of an aggregate length of 56 miles.

CHAPTER III.

PROTECTION AND IMPROVEMENT.

Establishment.

70. The permanent protective establishment in 1883-84 was the same as in the previous year; but in the temporary protective establishment there was a slight increase, consisting of one forester and 17 forest guards.

71. The efficiency of these establishments has been greatly improved by the posting of each member to definite duties, with fixed places as head-quarters, as exhibited in Appendix V. of this report. In addition to the sanctioned permanent establishment, 1 forest-ranger, 12 foresters, and 82 forest guards are still kept on the temporary establishment.

As was to be expected in a reform of this kind, a good many changes became desirable during the year under report, which was the first in which the executive and protective charges in the different divisions had been well defined and fixed, changes being not allowed without the previous sanction in writing from the Conservator. These alterations took place chiefly in the Gáro Hills, Kámráp, Darrang, and Lakhimpur divisions and very few, if any, should be necessary in the current year, since it is always a great advantage to have the places where forest officials are posted well known by the people.

	Per mensem.	Per annum.
	Rs.	Rs.
72. The total cost of the sanctioned permanent subordinate forest establishment at the close of the year was	2,444	29,328
The total cost of the sanctioned permanent office establishments at the close of the year was	765	9,180
Total	3,209	38,508

General protection against breaches of the forest law.

73. The number of prosecutions during the year were 89, as compared with 58 during the previous year, out of which 50 cases were convictions, 27 cases acquittals and 12 cases remained pending at the close of the year.

The number of persons tried were 152 only, as compared with 206, in the previous year and the persons convicted were 100, as compared with 151, whilst 52 persons were acquitted, as compared with 55 in 1882-83.

The increase in the number of prosecutions the Conservator attributes to an increased activity on the part of the forest officials, including mauzadars, rather than to an increase in crime. The increase of cases acquitted as compared with those in the previous year, from 24 to 30 per cent. and of persons acquitted from 27 to 34 per cent., as well as the decrease of cases convicted from 70 to 56 per cent. and of persons from 73 to 66 per cent., points to the probability that some of the prosecutions may have been instituted without sufficient caution.

74. The distribution of cases according to divisions will be seen from the tabular statement, Form 52, attached to this report.

By far the largest number of prosecutions were in the Lakhimpur district, which has partly to be attributed to the comparatively short time a Forest Officer has been appointed to this district, and the mismanagement of it last year, as well as to the extra inducement given for illegal fellings by a great and sudden demand for timber by the Railway Company.

75. As to the different classes of offences, they were the following, as compared with those in the previous year :—

	1882-83.	1883-84.	Increase.	Decrease.
Injury to forest by fire	2	3	1	...
Unauthorised felling or appropriation of wood and minor forest produce.	28	69	41	...
Grazing without permission or in tracts in which grazing is prohibited.	1	...	...	1
Other offences	19	14	...	5
Total	50	86	42	6

Grazing without permission, or in tracts in which it is prohibited, is scarcely known in this Province; there was not a single case this year, which is accounted for by the superabundance of grazing-grounds everywhere and it also shows that the villagers do not feel the exclusion of their cattle from reserves.

76. The number of cases compounded under Section 67 of the Forest Act was 45, for an amount aggregating Rs. 333-10.

Forest fires

77. The season of 1883-84 has been a most unfavourable one for the protection of forests against fire and Lower Assam, where this particular work is carried out, has not been so dry for the last 15 years as it was during the season under report and what made matters worse, the hot winds blew in spring with unusual force and more continually than is generally the case; but measures to keep the fires out of the reserves had been pushed on energetically in all those divisions where this work is attempted, so that there would have been an exceptional success, if the forests in the Goálpára division had not been set fire to intentionally.

78. The area which it was attempted to protect was 134,039 acres, as compared with 132,700 acres in the previous year. The failures came to 39,125, as compared with 35,049 acres last year, 33,056 of this were in the Goálpára division alone; the area actually protected during the year came to 94,914, as compared with 97,651 acres protected in the previous year.

Considering the extremely unfavourable season it has been, this must be considered as not a bad result and the Conservator is satisfied that great efforts were made by the officers in charge of the different divisions, as the measures of protecting the forests had more or less all been completed by the time the very dry weather and the hot winds commenced, yet there must be some reason for the malicious intentional burning of the forests in the Goálpára division year after year. The people are, as observed by the Commissioner, not generally malicious and Mr. Jellicoe and his subordinates cannot have had the sympathy of the inhabitants with them in their labours, or the forests would not get fired every year and the persons who committed the mischief would have been found out.

79. The Statement No. 51 attached to this report shows the extent of fire-protection carried on in the different forest divisions in this Province.

The proportion of failures to area attempted in percentage, as compared with the previous year, was as follows :—

	Proportion of failures to area attempted in percentage.	
	1882-83.	1883-84.
Goálpára division	47·61	64 32
Kámrúp "	10	11 09
Darrang and Nowgong division	7 48	0·20
Khási and Jaintia Hills	.....	0·41

This is not quite as favourable a result as was obtained in the previous year, but, as already stated, the season was an exceptionally bad one and some allowance must be made on this account and the fact that it is altogether impossible to prevent malicious acts like the intentional burning of the forest in the Goálpára division.

80. The cost of fire-protection during the season was Rs. 9,486. The following tabular statement exhibits the expenditure, as compared with the previous year, and the area attempted and actually protected in each division :—

	Increase in expenditure, as compared with previous year.	Increase in area attempted to be protected in acres.	Increase in area actually protected in acres.	Decrease in area actually protected in acres.
Goálpára division	1 485	.....	.....	13,010
Kámrup "	224	.....	.....	7,760
Darrang and Nowgong division	.....	13,302	14,052	.....
Khási and Jaintia Hills	.....	.....	.....	19
Total	1,709	13,302	14,052	20,789

The cost of this work per acre in the different divisions as compared with the previous year has been as follows :—

	1882-83. Rs. A. P	1883-84. Rs A. P
Goálpára division	0 1 2	0 1 3
Kámrup "	0 0 9	0 0 9
Darrang and Nowgong division	0 1 11	0 0 8
Khási and Jaintia Hills	0 9 7	0 6 3
Average for the whole Province	0 1 1	0 1 1

As already explained last year, the high cost of this work, if compared with most other provinces, cannot be avoided, since the grass is enormously high, necessitating the cutting of very broad fire-lines; and making the cost of clearing them exceptionally great, besides the high wages which have to be paid to all labourers in this Province.

Account of fire-protection according to divisions.

81. A more detailed account of fire-protection work according to divisions is given below :—

Goálpára division.

82. The protection of the Chirang reserve in the Goálpára division against fire was not attempted in the year under report, the areas in the Sidli and Guma reserves were the same as in the previous year, and to the Panbari forest has been added the Pechadavery forest, since they adjoin each other, thus increasing the area protected from fire in that locality from 300 to 3,290 acres.

83. The area not burnt was but small, amounting to 18,334 acres, all included, whilst the expenditure on fire-protection came to Rs. 4,024, as compared with Rs. 2,439 spent for this purpose in the previous year.

84. The arrangements made for the protection of the Sidli reserve were the clearing of about 30 miles of external fire-line 300 feet wide, 50 miles of compartment lines 20 feet wide, 8 miles along roads 100 feet on either side, and about 4 miles around patches of old cultivation, besides the burning off of a large piece of grass land in the south-east corner of this reserve.

The first fire in the Sidli reserve occurred on the 15th January; and little but grass land was burnt. This fire originated on the road near the Saumuka river, where some traveller is supposed to have been cooking his food.

The second fire broke out on the 9th of February in the middle of the Haltagaon block, and originated on a piece of land which was being brought under cultivation, without the knowledge of the forest officials; but, as it was discovered immediately, the fire-guards, assisted by villagers, very soon extinguished it, and only one square mile, the greater part of which was grass land, got burnt.

Thus far, the fire had done but very trifling damage, but on the 3rd of April and the two succeeding days fires broke out in different parts of the forests and 23 square miles were burnt before it could be got under.

Mr. Jellicoe states that the fresh grass had grown on the external fire-lines and along the road 18 inches high, whilst on the compartment lines it was still higher and he considers it as absolutely impossible that the fire can have come from outside and feels convinced the forest must have been maliciously set on fire.

85. In the Guma reserve measures for fire-protection were commenced as early as the 15th October, and by the 15th December the forest was completely isolated. The length of the external fire-lines was 22 miles, and they were 300 feet wide, besides which, 37 miles of compartment lines, 20 feet wide and 6½ miles 100 feet on either side of the cart-road leading through the forest, and about 3 miles along compartment line No. 9, 100 feet wide on either side, were all cleared and burnt. After the completion of the work, 30 coolies were posted at five different stations in the forests to patrol and be ready to extinguish any fire which might occur.

In spite of all these precautionary measures, the Guma reserve was set on fire on the 16th March in two places, one of which seemed almost inaccessible without a boat, and, as the wind was exceptionally high, all efforts made to extinguish the fire proved of no avail, and the whole forest, with the exception of only one square mile, was burnt.

86. The expenditure on this work in the Goálpára division was higher than in former years, as the natural consequence of the more extensive and thorough measures taken to protect the forests.

The details of this expenditure are shown in the following table :—

Particulars.	Sidli.		Guma.	
	Length of lines in miles.	Amount.	Length of lines in miles.	Amount.
		Rs.		Rs.
Fire conservancy establishments	.....	335	.....	183
External fire-line, 300 feet broad	30	1,052	22	1,999
Compartment line, 20 feet ,,	50		37	
Roads and pathways, 200 feet ,,	8		6½	
Temporary huts	.....	3	.....	42
Total	88	1,410	65½	2,224

The fact that the cost in the Guma reserve is Rs. 98 per square mile, or almost four times as much as in the Sidli reserve, where it came to Rs. 29 per square mile, is explained by Mr. Jellicoe by the greater amount of work done in the former by imported labour, instead of local labour, as was used in the latter and by the coolies in the Guma reserve having been kept on as fire-guards after all the work had been completed.

The expenditure on fire-protection in the Panbari and Pechadavery forest, was Rs. 125.

87. The forests in the Kámrúp division in which fire-protection was carried out are enumerated in the statement (Form 51) attached to this report, from which also other details regarding this work can be learned.

Kámrúp division.

As in former years, great success was attained in this important forest work in every forest except the Rani reserve. Here fire-conservancy was only commenced in 1882-83, and, as Mr. Mein explains, the system pursued has not yet been so perfected as in those forests which have now been protected for a number of years.

The measures adopted proved therefore insufficient, partly because the season was exceptionally unfavourable and also because this forest is bounded on the south by the Khási Hills, where as all forests are burnt annually, the fire is carried into the reserve. The best safeguard for this reserve will be to burn in future very early in the season the adjoining private forests. The owners would probably not object, as this always happens sooner or later, and tends to make the forests more accessible. There can be no doubt that the damage done to forests thus burnt early in the season is insignificant, as compared with the destruction caused by fires which occur later on.

The area which it was attempted to protect in the Kámrúp division during the year was 54,080 acres, or 84½ square miles, of which 48,080 acres, or 75 square miles, were successfully protected.

88. The total cost of this work was Rs 2,730-4-0 or about Rs. 32 per square mile, which is less than what it had been in 1881-82, but more than in the year preceding the one under report. The varying of this cost per square mile has to be attributed to the to some extent unsettled system in the large areas in which fire-protection was only commenced in 1882-83.

The following are the details of the expenditure on fire-protection during the season, *viz.*:—

	Rs.	A.	P
Cutting fire-lines	1,786	13	4
Beating jungle	111	6	6
Burning	116	12	5
Extinguishing fire	8	4	0
Establishments	711	15	9
Total	2,730	4	0

89. The practice of allowing people to cultivate grass lands in or adjoining the area covered with trees as an additional safeguard against fire is still being resorted to and with very good results, in consequence of strict supervision: 66·51 acres were thus leased for a total rent of Rs. 130-7 and 28·19 acres altogether free of rent.

90. In the Darrang and Nowgong division the protection of the Khalingduár reserve, 13,212 acres, has been attempted this year for the first time and about 90 acres more of the Charduár reserve were protected; as is shown in the Tabular Statement No. 51, attached to this report.

Darrang and Nowgong divisions.

91. The ordinary difficulties of fire-protection were increased greatly by the Aka expedition. The road towards the Aka Hills runs for 14 miles through the Bálipára reserve and any one, knowing the carelessness of transport coolies and cartmen, or of other travellers, tired out with their journey, in lighting fires in the forest wherever they happen to camp, will admit that credit is due to Mr. Campbell, the Divisional Forest Officer, for having succeeded in protecting all except 16 acres. There was naturally, also, a great scarcity of labour in consequence of the requirements of the expeditionary force, in spite of which all arrangements were completed by the end of December.

The 16 acres in the Bálipára reserve were set fire to by camp-followers of the Aka Expedition and another 16 acres in the Khalingduár reserve were, it is suspected, burned by a dismissed forest guard, but, as there was no proof, the man was not prosecuted.

92. In the Nowgong district 3 acres were burned in the Deboka and 15 acres in the Diju reserve out of a total area of 5,128 acres, the protection of which had been attempted. The first 3 acres were accidentally burned by elephant-hunters and the other 15 acres, it is suspected, were set fire to by other hunters.

93. The following table shows the cost of fire-protection work in the Darrang and Nowgong division in the year under report, as compared with 1882-83, the two districts being shown separately:—

	1882-83.			1883-84.		
	Acres.	Total cost.	Cost per square mile.	Acres.	Total cost.	Cost per square mile.
		Rs.	Rs. As. P.		Rs.	Rs. As. P.
Darrang ...	5,561	580	66 12 0	18,863	277	9 6 4
Nowgong ...	5,128	627	78 4 0	5,128	672	83 13 10
Total	10,689	1,207	72 8 0	23,991	949	25 5 0

The proportionately higher expenditure per acre on fire-protection in the Nowgong district, as compared with Darrang, is necessitated by the smaller areas of the Nowgong forests, their irregular boundaries and the nature of the grass-lands surrounding them.

Khási and Jaintia Hills division.

94. The area of forests protected in the neighbourhood of Shillong, in the Khási Hills, was the same as in the previous year, *viz.*, 4,578 acres, but 19 acres were burned on the 1st of May, after there had been almost continual rain for a fortnight and all the grass, as well as other vegetation, was quite green. It was the first day after the temporary fire-guards had been discharged, as there seemed no longer any necessity for their employment. No one can account for the fire, since the place where it commenced was away from the roads and at a time of day (1 p.m.) when hardly any persons are on the road; the only occurrence the Forester in charge considered possible was that lightning had struck the ground. The Conservator inspected the area on the 17th of May and found that next to no damage had been done, since even the smallest Oak-seedlings were then already shooting again. The possibility of lightning setting fire to the grass the Conservator did not believe in, but was convinced a week later, on the 24th of May, when lightning struck the ground on the hill-side above Shillong and burned the perfectly green grass on a patch measuring 90 feet by 75 feet; this lightning fell from an almost clear sky, although very heavy clouds were close by.

95. The cost of fire-protection work in this division has been much less than in the previous year and only came to Rs. 1,783, as compared with Rs. 2,748 in 1882-83. This decrease is due to the exceptional works of clearing the trees off all the fire-lines done in the previous year. The temporary establishment entertained for this work cost Rs. 619, whilst the rest, Rs. 1,164, was spent on the clearing of the fire-lines.

Natural reproduction.

96. The extremely mixed character of most of the forests in Assam makes it very difficult to form a correct idea regarding the natural reproduction of trees, particularly so of the better kinds as compared with the inferior ones and since in the mixed forest of Darrang, Nowgong, Sibságar, and Lakhimpur, the forests are completely stocked with more or less full-grown trees, but a small number of which is cut and removed, it naturally follows that the degree of natural reproduction is not the same as it would be, if more light and air were admitted into those forests by the regular removal of a large number of trees. The Conservator has however no doubt that in all of them the ground contains an immense quantity of seed, which either remains dormant or germinates and yields seedlings of insignificant size, which remain small for very many years, or again in other cases germinates but to die soon after by thousands. In short, the question of natural reproduction only becomes one of great importance when the forests are being worked to some extent and as a matter of course it is everything when forests are being worked up to their full power of productiveness, such as is the case in most of our Sâl forests now and in the more accessible lower hill forests in Cachar. In both these forests we are labouring under the great disadvantages as to natural reproduction, which are caused by the presence of dense and high grass and other scrub, the natural consequence of jhuming, fires, excessive and injudicious or unscientific felling of trees, as was carried on before forest conservancy was introduced by Government. To overcome these disadvantages, which are interfering with natural reproduction, requires either time or artificial help and the question, which of the two managements to adopt, depends simply on the amount of money available for forest improvement, since the knowledge and skill have been provided by the organisation of the Forest Department. There is of course also the fact to be taken into account that many trees only bear seed freely at certain intervals of three to five years, but that is a contingency with which foresters are well acquainted and prepared to take advantage of.

97. Speaking broadly, the natural reproduction in the Sâl forests of Assam is remarkably good and there is no doubt whatever, that, this, the most valuable tree in the Province, is spreading with considerable rapidity under the protection it receives in the Government forests, wherever there is sufficient light, and, on the other hand, the undergrowth in the way of grass and scrub is not too strong. It may also be said, that as a general rule, the latter is not the case in or immediately outside the forests, and where it is yet too strong to allow the young Sâl seedlings to grow up, it is steadily becoming less dense as the trees above or near grow larger.

Fire-protection, as a matter of course, greatly assists this gradual spreading of Sâl over blanks produced by former recklessness or ignorance.

Artificial reproduction.

98. This important forest work is, on account of its cost, somewhat restricted in this Province, and is only carried on in the Kámrúp, Darrang and Nowgong, Sibságar, and the Khási and Jaintia Hills divisions.

99. The area of plantations in the different divisions, and their cost during the year, as well as the expenditure on them from the commencement, are shown in detail in the tabular statement, Form No. 50, attached to this report.

From this statement it will be seen that the total extensions during the year amounted to 34 acres only, 21 of which were Caoutchouc and 13 acres timber plantation.

100. The Chief Commissioner had sanctioned an extension of the Charduár Caoutchouc plantation by 200 acres, half of which was to be done in the year under notice, but the Aka raid frightened the Kachari coolies out of the plantation, whilst all the local labour available in the neighbouring villages was impressed for work with the expedition against the Akas and after that was over their own domestic affairs required attention, which rendered this work impracticable.

Account of plantation work according to divisions.

101. Further details regarding plantation work are given below according to divisions.

Kámrúp division

102. At the Kulsi, in the Kámrúp division, no further extensions of the plantations are being made, except that some small areas, to the west and south of the existing ones, are planted with Rubber-trees, partly with a view of keeping fires out, and, as already stated, 21 acres have been planted in this manner. With this exception, the areas of the different plantations in the Kámrúp division remain the same as last year.

Details regarding measurements of trees, expenditure incurred and the rainfall at the Kulsi plantation, have been furnished by Mr. Mein in his plantation memorandum, which is attached to this report as Appendix VI.

103. The health and growth of the trees in the different plantations are excellent, and all that can be desired; the interplanting of the Rubber plantation with Tun and Bamboos has been continued, and in the Teak plantation of 1875 Sam seedlings have also been interspersed. The planting of Rubber was somewhat interfered with by the very unusual drought in October, whilst, on the other hand, no damage was done during the year under report by floods.

104. In the Sisu plantation Ajhar has been chosen to supply vacancies, as the former does not do well on the very low ground and for the latter this is much more suited than any other locality.

105. Regarding the cultivation of exotic trees at the Kulsi plantation, Mr. Mein reports that there are now 131 Ceara Rubber-trees, all growing well and the locality seems to suit them well. The largest tree, which was sown in 1879, measures now 20 inches in girth and 39 feet in height, and several of the oldest trees sown in 1879 are bearing seed, which ripens in the middle of March.

The Mahogany-trees continue to do badly and die, which seems to be purely the result of the climate. Pithecolobium trees are doing well, but they grow very lanky, so much so that they have to be supported by stakes in many instances.

The two trees of Maipak (*Evodia meliaefolia*) the wood of which is said to be well suited for shingles, have grown very well, and measure now 11 and 22 feet in height by 7 inches and 9 inches in girth respectively.

But little can be said about the growth of the Phillipine plantain (*Musa textilis*). The climate is evidently too cold for them, they keep alive and have made several young shoots, but there is no vigour in them.

The plants of the paper Mulberry (*Broussonetia papyrifera*) are growing remarkably well and several have already commenced to bear seed; they are also making root suckers, so that their ready propagation is ensured.

The small patch of Cinchona-trees at Jirang in the Khasi Hills was protected against fire and otherwise taken care of by the clearing of the undergrowth and the trees continue healthy, but their growth is slow. 600 seedlings of *cinchona succirubra* were also raised successfully at the Kulsi plantation from seed received from Dr. King.

Darrang and Nowgong division

106. The plantations in the Darrang and Nowgong division consist of Caoutchouc-trees only and, as already stated, no extension has been practicable during the year on account of the Aka disturbance; but about 30 acres have been prepared to some extent, and 340 young Rubber seedlings were planted out in the forks of 153 large trees. Each of these trees is numbered to facilitate inspection. This work has cost Rs. 109-2, or Rs. 3-10-2 per acre and after the paths are properly opened out, the cost of this mode of planting will probably come to Rs. 5 per acre.

107. Due attention has been paid to the maintenance and improvement of this plantation and it is satisfactory to notice that the expenditure is decreasing, as a reference to the Charduár plantation memorandum, Appendix VII. attached to this report, will show. The total expenditure, which had been Rs. 7,596-13-6 in 1882-83, came only to Rs. 4,890-2-3 in 1883-84.

As was anticipated in last year's report, it has been found possible to reduce the cost of fencing, the actual expenditure on the maintenance of the fence having been Rs. 27-2 only, whilst the balance of Rs. 473-6, as shown in Appendix VII., was the pay of four guards, two of whom patrol the external fence daily, and the other two watch over and protect the nurseries as well as those compartments which were never fenced in. The Divisional Officer reports that there will be no longer any necessity for keeping up the fence, since the trees have grown beyond the reach of the deer.

108. The clearing of the inspection-paths along the lines and keeping down of the undergrowth remain the largest item of expenditure, and this will continue so for a number of years to come, because many of the trees planted during the first few years had to be replaced, and others grew so slowly that the undergrowth has not yet been overcome by their shade. No less than 186 miles of this clearing of lines, 40 feet wide, was done during the year under report, at a cost of about Rs. 9 per mile. The inspection-paths also were much improved by levelling.

109. The number of trees planted on vacancies, or to replace sickly trees planted at the commencement and bitten by deer, or from other causes not growing vigorously, was 1,356, and the expenditure on this account no doubt will also henceforth decrease rapidly. But very trifling damage was done during the year by deer, whilst the protection against elephants has given more trouble than in former years. The Divisional Officer attributes this to the presence of the troops forming the Aka Expedition and the traffic connected with it, near the hills, which he thinks drove the elephants more into the immediate neighbourhood of the plantation.

110. A comparision of the statements given in Appendix VII. of this report, showing the number of trees of different sizes and the total number of trees in the plantation, with the same statement, Appendix VIII. of the report for 1882-83, will show what satisfactory growth these trees have made. The following is an abstract of that statment:—

	1882-83	1883-84.
Trees 5 to 10 feet high	1,864	359
" 10 to 15 "	6,565	6,383
" 15 to 20 "	2,543	5,137
" 20 to 25 "	939	1,427
" 25 to 30 "	279	467
" 30 to 35 "	183	139
" 35 to 40 "	64	48
" 40 to 45 "	21	20
" 45 to 50 "	3	1

The smaller number of the largest trees shown above in 1883-84 is accounted for by the encroachments of the Mansiri river, which washed away land on which some of the best trees stood.

111. The sowing and planting of timber-trees in the lines where the Rubber-trees are planted has been continued during the year at a total cost of Rs. 122-10.

112. The different nurseries were kept clean and newly fenced in, and no sowing of Rubber-trees was attempted, as there is a very large stock of plants in hand. Details regarding the sizes of the trees in the nurseries are also given in Appendix VII. and no extension of the nurseries was made.

113. The rainfall during the year was 84·93 inches, and the quantity which fell each month, as compared with the rainfall in the two previous years, has been shown by Mr. Campbell in a table in his Charduár Plantation Memorandum, Appendix VII.

114. The area of the small Bamoni Hill Caoutchouc-plantation near Tezpur remains the same as in the previous year, but the growth of the trees has much improved. The plantation is fully stocked, and the sizes of the trees are as follows:—

	1882-83.	1883-84.
Trees 5 to 10 feet high	174	41
" 10 to 15 "	216	145
" 15 to 20 "	215	294
" 20 to 25 "	146	257
" 25 to 30 "	35	59
" 30 to 35 "	...	4

The expenditure on this plantation during the year has been Rs. 50-4.

Sibságar division.

115. The area in the Nambor forest, where Ajhár and Nahor were sown and planted to improve the forest and to stock the land with superior timber-trees, was increased by about 13 acres, which was almost entirely sown with Ajhar, as the most valuable timber-tree of Upper Assam and its growth is everywhere excellent. The seed of this tree, sown in the year under report, did not germinate quite as well as formerly, which must be attributed either to the inferiority of the seed, or to the want of sufficient care in looking after the area sown, for a locality better suited to the growth of Ajhar could not be found anywhere in Assam.

Of Nahor but a small quantity was sown, as it is so very liable to be destroyed by wild pigs.

An experiment made with Poma or Tun (*Cedrela Toona*) was entirely successful and the young plants are growing luxuriantly where plenty of light is admitted. The young Poma seedlings will not thrive where they are subjected to much drip; good drainage is also essentially necessary for them in the Nambor forests.

The growth of the trees in the older plantations is vigorous, and could not be better.

116. The cost of this work continues high, which is explained by Mr. Fordyce by the high price paid for even the poorest labour in the Nambor forests. There is, however, this to be said, that the results of this rough sowing and planting are quite equal to those obtained in regular plantations.

The total expenditure during the year on this work has been Rs. 1,405.

Lakhimpur division.

117. The small patch of Teak-trees sown near Makum is still holding its own amongst the other forest trees, but with the exception of a few dominant trees they look sickly, and it is quite evident that the cold and wet of the locality are not suited to Teak.

The average height of 20 dominant trees measured was 52 feet with an average girth of 2 feet 4 inches.

There was no expenditure on account of this plantation during the year.

Khási and Jaintia Hills division

118. The expenditure incurred in the Khási and Jaintia Hills division was mainly on account of planting out Oak-seedlings on the blanks in the Riatkhwan forest between the cart-road and the bridle-path leading from Shillong to the Umiam river; the number of seedlings thus planted out and alive is 30,035, and they have succeeded remarkably well.

119. The Eucalyptus planted along the new watercourse have not done any better than in the plantation near the Umkra and the Conservator deprecates any more money being spent on attempts to make Eucalyptus grow in these hills for forest purposes; any money which may be available for plantation work in the neighbourhood of Shillong can be used to greater advantage in sowing and planting the indigenous Oaks.

120. The growth of the Kakra plants (*Pistacia integerrima*) is also not encouraging; although their appearance is healthy, they grow very slowly.

121. More plants of the Paper Mulberry have been raised, and this plant seems quite at home in the neighbourhood of Shillong, but the growth of it in the plains of Assam at the Kulsi plantation has been much stronger within the last year and since the plant is to be used for the manufacture of paper stuff and labour in the plains is only half of what it is in these hills, it would not be advisable to extend the cultivation at Shillong.

122. The year under report was a very favourable one for Oak-seed and 48 maunds were collected and sown; it has germinated well. As these good seed years occur only at intervals of several years, it will be advisable always to collect large quantities whenever the seed is procurable and to sow it invariably in nurseries to make the most of the seed and to prevent rats destroying a large quantity of it.

123. No additional trees have been bought for the orchard at Shillong. The stock of young seedlings of the indigenous apple is doing well, but the growth continues slow.

Cutting of climbers.

124. The cutting of climbers was carried out in the Sâl forests of the Goálpára and Kámrúp divisions; in the former, seven compartments (4,480 acres) in the Guma reserve were cleared at a cost of Rs. 194, and in the latter 1,700 acres were gone over in the Pantan, Barduár, and Kulsi plantation reserves at a cost of Rs. 68-10-9.

Communications and buildings.

125. Road-work has been pushed on during the year and Rs. 5,779 have been expended, as compared with Rs. 3,926 in the previous year. The expenditure on buildings has been Rs. 14,835, as compared with Rs. 13,287 in 1882-83. Both works are much required in this Province, the former for the efficient protection of the forests and the latter to afford proper shelter to the staff, to counteract the unavoidable exposure in the forests.

Account of road-work according to divisions.

Gáro Hills division.

126. In the Gáro Hills division a road was constructed from the district boundary at Damra to Gabul, with a view to making the valuable Dambu forest, which contains magnificent Sâl-trees up to 14 and 15 feet in girth, accessible to timber traders. The total length of this road is about 19 miles, of which the portion from the district boundary at Damra to the Dudnai river, a distance of 5½ miles, was made 12 feet wide and from the Dudnai to Chima, a distance of 2½ miles, 8 feet wide. The remaining portion, from Chima to Gabul, a distance of about 11 miles, was also first made 8 feet wide, but afterwards improved and widened to 10 feet. The total length of the road from the Dambu forest to Dumra will be about 26 miles, of which 18 miles, or from Dambu to Chima, will be used for the transport of timber, as from the latter place the logs can be floated. The total expenditure on this road during the year under report was Rs. 1,887.

Goálpára division.

127. In the Goálpára division no road-work was attempted by this department, but the construction and improvement of the district road leading through several of the reserves, referred to in paragraph 93 of last year's report, has been continued, and timber has been supplied, as before, from the reserves for bridges free of royalty.

Kámrúp division.

128. In the Kámrúp division no new road works were attempted, as much remained to be done to the roads commenced in previous years. On the district road, running through three of the Government reserves, four bridges were repaired, the embankments raised and widened in several places and the gradient of the portion crossing over the hills in the Barduár reserve was much improved by blasting the rocks and cutting down the hill. The road was kept open and in fair order throughout the year, and the ferry at Hatigarhghát was also maintained in proper working order. The amount granted by the District Road Committee on account of these works was Rs. 285 and the amount spent on the same by this department was Rs. 631-0-6. The improvement in the road leading from Hatigarh to Balikushi was continued, several bridges were added and the embankment strengthened; this road was also kept open all the year round for horses and elephants. The expenditure on it during the year came to Rs. 799-6-9.

The Rájapára road was improved, and three small bridges constructed. No funds were granted by the District Road Committee, although it had been made a district road; this department spent Rs. 239-11-9 on it.

The roads and inspection paths in and around the Kulsi plantation were kept clear and in good repair; one bridge was constructed and the old bridges repaired and the embankments raised in several places. The expenditure on these works was Rs. 282-15-0.

The total expenditure in the Kámrúp division on road-work was as follows:—

	Rs.	As.	P.
Bridge-work	981	3	3
Earth-work	514	14	9
Clearing jungle	315	13	0
Dressing	141	3	0
Total	1,953	2	0

The Darrang and Nowgong division.

129. Most of the forest roads in the Darrang district were cleared and improved in connection with the Aka Expedition and a new road from the Bálipára Sâl forest to Dijumukh and a path from there to Bhalukpung, altogether about 12 miles, were opened out; they will be most useful for forest work and inspection.

The road running along the southern boundary of the Charduár reserve to Daimara was cleared for about 17 miles. This has relieved the department to a considerable extent of expenditure on road-work in this division, the whole of which during the year came to only Rs. 126-9-0.

In the Nowgong district all the roads in or near the Government reserved forests are in charge of the District Road Committee, except a road passing through the Diju reserve which is kept up by planters interested in it.

Sibságar division

130. In the Sibságar division all the existing roads in the Nambor reserve, about 50 miles in length, were kept clear and in good order for horses and elephants, at a cost of Rs. 216, or about Rs. 4-5 per mile, which is very cheap, particularly when the high rates of wages paid in this locality are considered.

In the Mikir Hills a new road was commenced to make the large reserved forest in those hills more accessible by clearing a track, the length of which is about 40 miles, and, with the exception of one or two places, it was reported rideable at the close of the season at the small cost of Rs. 93-12-0.

Besides this, the clearing of a path from the Dhudar Ali to the northern boundary of the Holangapar reserve, the clearing of the old Horiohuter Ali in the Solah reserve and of a track running from the Kacheimara Pathar to the Mohindra Pathar, connecting the eastern and western boundaries of the Dirai reserve, measuring in the aggregate 12 miles, were partially opened out at a cost of Rs. 67-12-0.

Lakhimpur division.

131. The only road-work attempted in the Lakhimpur division was the clearing of the Raidang Ali, which runs from the Assam Trunk Road to the boundary of the Dehingmukh forest and is about 5 miles long and of a portion of the old Dum-duma Makum road at a total cost of Rs. 75.

Cachar division

132. In the Cachar division, road-work has again been pushed on and new lines of roads have been prospected for; these works, arranged according to reserves in which they were carried out, are the following:—

In the Upper Jiri reserve two roads were made, one from Jirighát, *viâ* Bahadurpur, to the inspection hut at the north-east corner of the reserve, a distance of about 11 miles and a second from Diglimukh to Godamghát, a distance of about 5½ miles, crossing the southern portion of the reserve; the former is rideable for about 5 miles, but the remaining 6 are not and the latter portion will require a higher expenditure to make it so, as the hills across which this portion leads are very steep. The second road runs for 3 miles on flat land and this portion is passable for ponies; the remaining 2 miles, although not so difficult as the other road, will require a good deal more expenditure to make it rideable. The cost of the work on these roads during the year was Rs. 407-8-3.

In the lower Jiri reserve a preliminary line was cleared from Bagkhalmukh, *viâ* Lalkham Punji, to the Alni grant boundary. The expenditure on this during the year was Rs. 12-10-0.

In the Barák reserve, one road running from Mankhush along the left bank of the Barák river by Naraindhar Punji, Akhai Bázár and Bhubankhalmukh to Bhubandhar and the other from Akhai Bázár to Monthy Punji and along the top of the Bhuban range to the Inner Line, were opened, but both of those roads will require a considerable expenditure yet to make them rideable for their entire length, which is about 21 miles. The expenditure on these roads during the year has been Rs. 497-12-0.

In the Sonai reserve a path was opened out from the Rukni grant across the forests to the Monierkhal grant at a cost of Rs. 18-6-0.

In the Katakhal reserve the road opened out in the previous year from Loharbund to Barun Cherra, a distance of 22 miles, has been improved, but there remains a great deal to be done to make it a good road fit for ponies. The expenditure on this road during the year was Rs. 174-14-0.

In the Dhaleswari reserve the path connecting the Cutlicherra-Rupatang road with the Inner Line, a distance of about 12 miles and another short path from the Nagdirgram guard-house to the district road, have been kept in good order at a cost of Rs. 180.

Besides the above, a miscellaneous expenditure of Rs. 54-10-6 brought the total cost of road-work in the Cachar division during the year up to Rs. 1,345-12-9.

Account of buildings according to divisions.

133. A bungalow in Gauháti was bought for the officer in charge of the Kámrúp division for Rs. 5,658 and two other bungalows, one at Tura in the Gáro Hills and another one at Dibrugarh in the Lakhimpur district, are under construction. The progress made in the latter two buildings during the year was slow.

Small inspection huts in the forests were built and repaired in all the divisions. Of the latter work, like that of road-making, a great deal remains to be done; still matters have much improved within the last year or two, as regards the shelter available for officers and their subordinates in the forests.

134. In the Gáro Hills division the progress in the building of the Divisional Officer's house was delayed, because a great deal of the timber sawn whilst Mr. Ludlow was in charge of this division had to be rejected and the newly-sawn timber was not delivered until the close of the year. The expenditure incurred on this account during the year was Rs. 1,224-11-9, whilst that incurred on the construction and repairs of huts in the forests for the Divisional Officer and his subordinates came to Rs. 392-3-0.

Gáro Hills division.

135. In the Goálpára division, Rs. 983 were spent entirely on repairs of existing buildings; no new work was done in the year.

Goálpára division.

136. In the Kámrúp division the chief expenditure under the head of "Buildings" was Rs. 5,658, the purchase-money of the Divisional Officer's bungalow. Besides this, a new hut was built at Umsura for the forester in charge of the Jirang range at a cost of Rs. 50-2-0 and Rs. 744-5-3 were spent on repairs of existing buildings.

Kámrúp division.

137. The only new building constructed in the Darrang and Nowgong division was an inspection hut near the Deboka reserve at a cost of Rs. 278-1-0; the remaining expenditure during the year came to Rs. 537-9-0 on account of repairs to existing buildings and temporary huts.

Darrang and Nowgong division.

138. In the Sibságar division the bungalow of the Divisional Officer was re-thatched and otherwise repaired at a cost of Rs. 181-0-9. The inspection bungalow at Golághát and the huts at Ohgori and at the Daigurung were also thoroughly repaired at a cost of Rs. 314-3-0. Materials were collected for building an inspection hut at Kacheimara and huts for forest guards were built at Dimo, Sukwah, Sonari, and Desangmukh. The expenditure incurred on this account was Rs. 98-8-0.

Sibságar division.

139. But little progress was made in building the Divisional Officer's bungalow at Dibrugarh, which is being done by the Department Public Works; the expenditure during the year on this account was Rs. 378-0-0. An inspection hut was built at Margherita on the right bank of the Dehing river, in the Upper Dehing forest, at a cost of Rs. 200, and another one in the Parapara forest on the Sobru river, costing Rs. 150, including out-houses. Huts for forest guards were built, one at Margherita for Rs. 50, and one at Balu Bázár in Dibrugarh for Rs. 150.

Lakhimpur division.

140. In the Cachar division a new inspection hut was built at Loharbund for the Katakhal reserve and another one in the Upper Jiri reserve, each at a cost of Rs. 600 and new out-houses were built and fenced in at the Baruncherra inspection hut, at a total cost of Rs. 60. At the Matijuri revenue station a cookshed was put up at a cost of Rs. 15 and another hut for forest guards at Haitu, in the North Cachar Hills, at a cost of Rs. 30. The rest of the expenditure under this head, amounting to Rs. 1,225-6-4, was spent on repairs of existing buildings and the fences around them.

Cachar division

CHAPTER IV.

YIELD AND WORKING

Departmental operations.

141. No timber operations are any longer carried on in Assam by direct departmental agency. The 301 trees, 1,679 logs and other forest produce shown in statements Nos. 58 and 59 attached to this report, were worked out for the use of the department or consisted of drift and confiscated timber and other produce.

Full details regarding the trees felled, the produce cut and collected, the timber and other produce received from forests into sale depôts and the sale of timber and other forest produce cut and collected by Government agency, are given in statements Nos. 58 to 61. These transactions are so insignificant that no further remarks regarding them are necessary.

142. Statement No. 62 shows the timber and other forest produce in hand at the commencement of the year, the receipts and disposals and the balance remaining at the close of the year. The small quantity of timber remaining is intended for the use of the department and since the value of the other produce is but trifling, the actual results of the timber works by direct departmental agency carried on during the last five years, are now finally shown below:—

	Rs.
Value of timber sold from 1879-80 to 1883-84	84,472
Half value of live and dead stock at close of 1881-82	35,676
Expenditure on timber from 1879-80 to 1883-84	56,984*

Deducting the amount shown in the third line from the total of the first two lines, leaves the net value of the departmental timber work during the last five years, which is Rs. 63,164, in favour of these operations on the total quantity of timber disposed of amounting to 109,232 cubic feet.

The number of trees felled during these five years was 1,504, which, at the rate of royalty fixed for the time being by the Chief Commissioner, represent a value of Rs. 12,400. This, together with the above Rs. 56,984, expended on this timber, gives a total amount of capital of Rs. 69,384, against the total receipt of Rs. 1,20,148, as shown in the first and second lines of the above statement.

Account of departmental timber operations according to divisions

143. The departmental operations during the year according to divisions were briefly as follows:—

The Gáro Hills division.

144. In the Gáro Hills division the timber required for the Divisional Officer's bungalow was brought out from the district forest at Darugiri and amounted to 76 Sâl-trees, besides which, 30 logs and two boats or dug-outs were collected as drift wood and sold locally.

In addition to this, 12 maunds 23 seers and 12 chhataks of rubber were collected by the Gáros and brought to the District Forest Officer who bought it at the rate of Rs. 20 per maund and sold it again at Rs. 60 per maund; there was a loss of 8 chhataks by drying.

The expenditure on account of this rubber was Rs. 241-10-0 and the receipts came to Rs. 754-4-0.

Kámrúp division

145. In the Kámrúp division only 11 trees were felled and 117 dead Sâl-posts removed by Government agency for use by the department. 17 Sâl-logs were sold from depôt for Rs. 209 and a sum of Rs. 43 was realised by the sale of old boats.

Darrang and Nowgong division

146. In the Darrang and Nowgong division 71 trees were felled for use by the department, 65 in the Darrang and 6 in the Nowgong district. Three of the former, *viz.*, Amari (*Amoora spectabilis*), Gunserai (*Cinnamomum glanduliferum*), and Makordhumia (*Chickrassia tabularis*) were felled to season for specimens.

The timber shown in Statement No. 62 as brought to, and remaining in, depôt is required for the use of the department and the timber shown as sold in the same statement was old stock, or drift and confiscated timber and other produce sold locally.

147. Great efforts were made by the Divisional Officer to continue the experimental tapping of 50 Rubber-trees, but, in consequence of the Aka raid, all men refused at the proper season to go into the forest to tap and when Mr. Campbell at last succeeded in

* This expenditure is shown annually in Form No 57 under the head of timber work by Government agency, which includes half cost of live and dead stock up to the close of 1881-82 and the value of the latter has under those circumstances to be added to the value of timber to show result.

inducing a number of men to go, the season had so far advanced that most of the juice was washed off the trees by the heavy rain and tapping the upper portions of the trees became next to impossible. The result of this work is given in Appendix VIII., but for reasons stated above it is of but little value; there is, however, one thing which this experiment seems to have proved and this is that tapping old incisions gives a very much smaller quantity of rubber than if incisions are made in places not cut before.

Lakhimpur division.

148. In the Lakhimpur division 26 trees were felled for use by the department; no other works were carried on by Government agency.

Removal of produce by purchasers.

149. The exercise of an efficient control over the removal of trees and other forest produce by purchasers was greatly facilitated during the year by the Chief Commissioner's Resolution No. 697, dated 13th April 1883 and the rules circulated with it (Appendix X. of last year's report), by which rules the mauzadars have been placed under the direct orders of Forest Officers, as regards the management of district forests. This arrangement has had a most beneficial effect, and is reported on very favourably from every district, it having to a great extent lessened unauthorised fellings in district forests.

150. Rule VI, of the Rules of the 13th April 1883 for district forests in Sylhet and Cachar and Rule VII. of the Rules of the same date for district forests in the Assam Valley districts, were cancelled by order of the Supreme Government and other rules substituted for them in Revenue Department Notification No. 35, dated the 23rd August 1883, published in the *Assam Gazette* of the 25th August 1883, page 425; they are attached to this report as Appendix IX.

151. In the rules for district forests in Sylhet and Cachar, the following corrections were sanctioned by the Chief Commissioner in Revenue Department Notification No. 29, dated 20th June 1883, published in the *Assam Gazette* of the 23rd June 1883, page 287:—

"1. In the definition of the term 'forest produce,' after the word 'charcoal,' add the words 'thatching-grass, ágar, reeds, and leaves,' and strike out the word 'and' before the word 'charcoal.'

"2. In Rule III., 'Trade permit and fees to be paid for it,' *for* '31st August' *read* '30th September.'"

And it was further ruled by the Chief Commissioner during the year, in Revenue Department Notification No. 50, dated the 31st December 1883, published in the *Assam Gazette* of the 5th of January 1884, page 3, that half rates of royalty shall be levied on such timber and other forest produce as is taken from *nisf-khirdj* land.

152. The Chief Commissioner has also been pleased to make, and, with the sanction of the Government of India, to publish, in Revenue Department Notifications Nos. 21 and 22, dated 10th May 1883, in the *Assam Gazette* of the 12th May 1883, page 216, Rules for the protected forests in Sylhet and Cachar and River Rules for the Sylhet district, which are attached to this report as Appendix X.

153. Since forest produce was removed from the district forests in the Jaintia Hills, not only by the inhabitants of those hills, but also for the purpose of trade to the district of Sylhet, rules were drawn up for regulating the removal of forest produce from Government district forest in a tract of country in those hills immediately north of the Sylhet district and sanctioned in a notification, dated 21st March 1884, published in the *Assam Gazette* of the 29th March 1884, page 138. These rules are attached to this report as Appendix XI.

154. Rules for the protected forests in the North Cachar Hills were also made by the Chief Commissioner and published, with the sanction of the Government of India, in Revenue Department Notification No 12, dated the 25th April 1884, in the *Assam Gazette* of the 26th April 1884, page 188. These rules are attached to this report as Appendix XII.

155. Up to the year under report the removal of trees and other forest produce by purchasers had been steadily increasing, and in 1882-83 this increase had been very large, owing, as stated in last year's report, amongst other causes, to the rise in the price of timber in the Calcutta market; the latter, no doubt, induced the Bengal traders to purchase more timber last year than they were able to dispose of profitably; and the consequence has been that but a small number of traders came to Assam this year and much of the timber brought out in the Goálpára division, which was not of exceptionally good quality and large size, has remained unsold on the hands of the timber-cutters, who thus were unable to purchase more trees, although only half royalty is being collected at first.

To make it clear how this affected the sale of trees last year, it must be explained that the timber year begins, so to speak, in November, when all timber felled during the 12 months previous, is sold and the money realised is then used to purchase more trees.

156. The timber brought out from the Gáro Hills, was so large and superior that every log was sold, whilst most of the timber brought out from the private forests in the Goálpára district, which is small, remained unsold, but the timber-cutters in the Gáro Hills had their troubles also, inasmuch as October 1883 was so exceptionally dry that a great deal of their timber remained in the mountain streams, because there was not water enough to bring it down to the plains and the Brahmaputra.

157. In the Kámrúp division the causes which brought about a decrease in the sale of trees were the same as in the Goálpára division, but the fall was not so great, probably because large and fine trees in the latter are getting scarce and are to be found now only in the more distant and less accessible localities.

158. The decrease in the Darrang and Nowgong division took place mainly in the sale of unreserved trees in the Nowgong district and is attributed by the Divisional Officer to ordinary fluctuations in trade.

159. The exports of logs from Cachar shows a very large increase, which the Divisional Officer attributes to the lowering of the rates of royalty on third-class wood.

160. Full details regarding all timber and other produce cut, collected, and removed from the forests by consumers or purchasers during the year under report are given in Statement No. 63, attached to this report and the amount realised on account of transactions in the previous year has been added to the amount collected on account of timber and other produce sold during the year, so as to make the total amount agree with that shown in the summary of revenue (Form No. 53), as desired by the Government of India in reviewing last year's report.

161. The increase and decrease in the yield of the forests, as compared with that of the previous year, are also shown in the fullest detail in Appendices XIII. and XVI.

162. The number of trees which have been removed by purchasers from the forests in the valley districts, the Gáro, Khási and Jaintia, and Nága Hills, were the following:—

	Sal.	Reserved trees.	Others.	Total.	Equivalent in cubic feet.
From reserved forests	4,023	880	373	5,256	157,680
protected and district forests	1,869	2,213	2,091	6,193	185,790
Total	5,892	3,093	2,464	11,449	343,470

The solid cubic contents per tree has been taken at 30 cubic feet, which is low, no doubt, but there is still much waste in this country, as compared with the working of forests in Europe.

163. The poles, boats, and dead wood, in cubic feet, removed by purchasers from the forests in the valley districts, the Gáro, Khási and Jaintia, and Nága Hills, were the following:—

	Poles. c. ft.	Boats. c. ft.	Dead wood. c. ft.
From reserved forests	8,790	3,200	108,950
protected and district forests	2,930	40,325	157,320
Total	11,720	43,525	266,270

164. The logs, poles and planks and firewood, in cubic feet, removed by purchasers from the Government, foreign and private forests in Cachar and Sylhet were the following:-

	Logs. c. ft.	Poles and planks. c. ft.	Firewood c. ft.
From Government forests	221,425	92	6,828
" foreign	39,445	.....	228
" private	408,729	1,167	11,648
Total	669,599	1,259	18,704

165. The valuations of timber and other forest produce on land allotted for cultivation have been made in almost all cases by forest officers. There was an increase in the area so allotted in the Lakhimpur and Cachar divisions and a decrease in the Darrang and Nowgong, Sibságar and Sylhet divisions; altogether the areas of forest land now taken up are limited, as will be seen from the subjoined statement:—

Sale of trees on land allotted for cultivation

Name of division.	Area of forest land allotted for cultivation, in acres.				Amount of forest revenue realised and due.				Average amount per acre.			
	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.
					Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Darrang and Nowgong	1,446	1,005	...	441	1,324	3,343	2,019	...	0 14 8	3 5 3	2 6 7	.....
Sibságar	1,179	649	...	530	3,546	1,150	...	2,396	3 0 1	1 12 4	.....	1 3 9
Lakhimpur	689	1,962	1,273	...	2,068	3,038	970	...	3 0 0	1 8 9	.....	1 7 3
Sylhet	932	177	...	755	500	70	...	430	0 8 7	0 6 4	.....	0 2 3
Cachar	...	923	923	...	...	3,401	3,401	...	...	3 10 11	.....	.....
Total	4,246	4,716	2,196	1,726	7,438	11,002	6,390	2,826	1 12 0	2 5 3	.....	.....

Out of the amount of Rs. 7,438, the value of the trees and other forest produce on land leased in 1882-83, Rs. 202 were realised in the Darrang and Nowgong division in the year under report, and out of the amount of Rs. 11,002, the value of trees and other forest produce standing on land leased in 1883-84, the sum of Rs. 4,028 remained outstanding at the close of the year.

In the Cachar division Rs. 4,732, the amount shown in Statement No. 63, as realised on account of timber and other forest produce on leased land were not shown in the above table, because they were arrears on account of years previous to 1882-83.

166. No direct control is exercised, or statistics collected, by this department regarding the yield of Caoutchouc or India-rubber in this Province, but, deducting the imports from the exports, as was done in previous years, the difference is 8,150 maunds, presumably collected in the forests of Assam, as compared with 4,743 maunds collected in the previous year. Fewer passes to go beyond the British boundary were granted in the Darrang district to rubber-collectors during the year under report and some of the passes granted were afterwards cancelled, which may account for the small imports and greater activity in British territory, as indicated by those figures.

The Caoutchouc or Rubber trade.

167. The following table shows the amount of revenue collected during the year on account of the sale of rubber-mahâls and the amount which remained outstanding on that account:—

1	2	3	4	5
Names of districts	Amount realised on account of rubber-mahâls sold in 1882-83.	Total amount for which Rubber mahâls were sold in 1883-84.	Amount realised on account of rubber-mahâls sold in 1883-84.	Amount outstanding on the 1st of April 1884, on account of rubber-mahâls sold in 1883-84.
Nowgong	.....	905	905	.....
Darrang	.....	22,100	22,100	.....
Nowgong	.....	295	295	.....
Lakhimpur	1,838	10,000	5,000	5,000
Cachar	.....	2,000	1,000	1,000
Khási and Jaintia Hills	.....	600	600	.....
Nága Hills	.....	800	800	.....
Total	1,838	36,700	30,700	6,000

168. In the Gáro Hills division the number of trees sold standing in the forests was only 989, as compared with 1,585 sold in the previous year and 1,375 boats or dugouts were worked out by the Someswari river, as compared with 411 only in the previous year. On these the royalty is collected at an *ad-valorem* rate of 10 per cent. Of dead wood, 2,852 pieces were worked out, as compared with 3,379 pieces removed in the previous year and 120 posts, as compared with 67 only in the previous year.

Gáro Hills division.

The revenue collected on *gitrkati* licenses is an important item of forest revenue in the Gáro Hills, which had fallen off in 1882-83, but in the year under report the number of licenses sold has again risen, as shown in the subjoined statements:—

	1882-83.	1883-84.
Gáro passes	2,358	2,300
Foreign passes	1,223	2,210
Total	3,581	4,510
In Government forests	3,043	4,029
In shared forests	538	481
Total	3,581	4,510

In the Government forests 713 more foreign and 273 more Gáro licenses were sold than in the previous year, whilst in the Karaibari shared forests 274 more foreign and 331 less Gáro licenses were sold. The Divisional Officer accounts for the latter by the fact that most of the labouring Gáros in the northern part of the hills were employed on the Dambu road, which they found as profitable, if not more so, than trading in minor forest produce.

Goálpára division.

169. In the Goálpára division the number of trees sold was only 1,863, as compared with 5,653 sold in the previous year. This great decrease is, as already stated, owing to the fact that only few timber traders came from Bengal and that much of the timber brought out of the forests, remained on the hands of the duffadars or timber cutters, who thus were unable, and also unwilling, to buy more trees in the year under notice.

The Divisional Officer is also of opinion that the larger trees in other localities, as for instance the Gáro Hills, have attracted some of the wood-cutters who used to work in the Goálpára district; but, as already stated, this cannot be the cause, since the sales in the Gáro Hills have also been considerably less.

The proportion in which the trees sold came out of the different reserves and district forests was as follows:—

Sidli reserve	..	663 trees.
Chirang ,,	...	521 ,,
Ripu ,,	..	485 ,,
District forests.	..	194 ,,
Total	..	1,863 ,,

In addition to these, there were sold 879 poles, 1,054 pieces of dead wood, 128 boats or dugouts and 6,544 bamboos, besides other minor forest produce.

The timber and other forest produce on which royalty was collected at the Dhubri check station, because it was unmarked or without a pass, is shown in the following statement:—

Description.	Number or quantity.	Amount of royalty. Rs.
Sâl-logs	20	50
,, dugouts	94	897
Dead Sâl-logs	32	32
Sâl-saplings	513	32
Other wood dugouts	34	121
,, ,, logs	2	3
Charcoal	46	6
Bamboos	6,544	131
Cane	63,571	485
Total	.....	1,757

Kámrúp division.

170. In the Kámrúp division the following trees were sold during the year, as compared with 1882-83:—

	1882-83.	1883-84.
From reserves	4,134	3,125
,, district forests	2,135	1,324
Total	6,269	4,449

The only other item of any importance is dead wood, of which 9,850 pieces were removed, as compared with 7,065 pieces in the previous year.

Darrang and Nowgong division

171. In the Darrang and Nowgong division the number of trees sold, as compared with the previous year, was as follows:—

	1882-83.	1883-84
From reserves	160	333
district forests	1,652	1,115
Total	1,812	1,448

Besides this, 7,944 maunds of charcoal were removed; all other items are of minor importance. The amount for which the rubber-mahâls were sold has already been shown above in paragraph 167 of this report.

Sibsâgar division

172. In the Sibsâgar division the number of trees sold was greater than in the previous year, which must chiefly be attributed to the introduction of the district forest rules and to better control over the removal of timber by mauzadars. The sales were the following:—

	1882-83	1883-84.
From reserves	702	129
district forests	351	1,032
Total	1,053	1,161

The only other item of importance was 114 boats or dugouts.

Lakhimpur division.

173. In the Lakhimpur division there was also a slight increase in the sale of trees, it having been 1,436, as compared with 1,260 sold in the previous year.

The receipts from timber and other forest produce standing on lands leased, and the receipts from rubber-mahâls in this division have already been shown above in paragraphs 165 and 167.

Full details about the yield of all descriptions of other forest produce, not specially mentioned above, have been given in Statement No. 63 and Appendices XIII. and XVI. of this report.

Cachar division

174. In the Cachar division the number of logs brought from the Government forests has increased considerably, and was as follows:—

	1882 83.	1883-84.
Reserved forests	1,539	4,785
District "	.....	1,521
Total	1,539	6,306

In the removal of other produce, such as firewood, bamboos and canes, there has, however, been a decrease, full details regarding which are also given in Statement No. 63 and Appendix XVI.

From the latter, it will be seen that the number of logs worked out from both the Government and foreign forests on which royalty and duty are collected has increased, whilst the number of logs worked out from private forests on which no duty is collected, has decreased, indicating that the timber supply from the latter is getting less. At the same time the fact should also be pointed out, and not be lost sight of, that the number of logs worked out from private forests was 19,965, whilst that from Government forests was only 6,273. In most of these private forests, no charge whatever was made for the trees and other forest produce and the consequence is that land, ostensibly taken up for the cultivation of tea, is now worked for the purpose of trading in timber.

175. The following figures show the quantities of each class of wood worked out from the Government forests in the Cachar division during the year, as compared with the previous year:—

	1882-83.	1883-84.
	Logs.	Logs.
First-class timber	860	536
Second ditto	481	164
Third ditto	131	5,578
Total	1,472	6,273

The Divisional Officer accounts for the decrease in the removal of the better class of timber by the limited local demand there is for it, and, on the other hand, for the increase in the removal of third-class wood, by the large local demand for tea-boxes, which are

nearly all made of third-class wood and a preference on the part of the traders for quick sales and early returns for their money, as compared with the protracted sales and deferred payments in the export trade of the superior timber.

In the case of bamboos, which are also a considerable item in the yield of forests in Cachar, there has been a decrease in the quantity removed from Government and private forests and a corresponding increase in their removal from foreign forests, as compared with the previous year, which is accounted for by the fact that in 1882-83 Lushais were allowed to remove bamboos free from the Government forests to buy themselves food, whilst in the year under report royalty had to be paid, and that bamboos in foreign forests are particularly accessible.

There was also an increase in the quantity of reeds and grass removed from Government forests.

176. The number of logs from Government forests which passed the Matijuri revenue station is more than double what passed in the previous year, whilst the logs from the Government forests which passed the Silchar revenue station was over seven times the quantity which passed in the previous year.

The quantity of timber which remained in the district at the close of the year was about the same as in 1882-83.

The total number of logs registered in the year was 27,354, as compared with 22,925 in the previous year, or in cubic feet 664,778, as compared with 605,280 registered in 1882-83, still showing an increase in the timber trade. The average cubic contents per log was 24 feet, or 2 feet less than in the two previous years.

The number of logs which passed out of the district at Siyaltek during the year was 1,715, measuring 43,176 cubic feet, as compared with 741 logs, measuring 18,591 cubic feet, showing also an increase in the export of timber, but the latter is only about one-fourth of the increase in the total number of logs worked out in the year, proving that the consumption of timber in the district is increasing at a much greater rate than the export of timber.

There has been a falling off in the removal of boats and other forest produce from the North Cachar Hills, as registered at the Diyangmukh police outpost, except planks. The total estimated value of the produce exported during the year was Rs. 6,770, or Rs. 720 less than in the previous year.

177. The number of licenses issued in the year under report to timber-cutters and such as were issued for elephants dragging timber, has been given in Appendix XV.

There has been a decrease of 156 licenses granted for cutting timber and other forest produce, and an increase of 42 licenses granted for elephants dragging timber. Of home consumption licenses, which had not been granted formerly, 56 were sold in the year under report.

Sylhet division

178. Since there is no separate forest establishment entertained as yet in Sylhet beyond a few forest guards, the registering of timber and other forest produce removed is not so accurately done as in Cachar. According to the information received, 4,659 cubic feet of timber in rough logs were brought out, and 162 cubic feet of converted timber. In addition to this, 356,255 bamboos, 2,913 bundles of cane, 52,108 bundles of reeds and thatching-grass, besides other minor produce, were brought out of the forests. The sum of Rs. 1,108 was collected on account of license-fees.

In addition to this, the right to remove timber and other forest produce from three small forests was sold by public auction to the highest bidder for an aggregate amount of Rs. 2,450.

Khasi and Jaintia Hills.

179. The number of Sâl-trees sold in the Khasi Hills was 64 and that of unreserved trees 12, besides which, 12,810 pieces of dead wood were also sold, and realised Rs. 948. The rubber-mahál in these hills was sold for Rs. 600, whilst the cassia-mahál and other minor produce realised Rs. 196.

Nága Hills division.

180. In the Nága Hills district only two reserved trees were sold during the year, and the rubber-mahál realised Rs. 800.

Free grants of forest produce

181. In the Goálpára division 238 Sâl-trees were made over free of royalty to the District Engineer, for the purpose of building bridges on the new district road in the Eastern Duárs, as this leads through four of the Government reserved forests, and makes them much more accessible.

182. To the Assam Railway and Trading Company 7,470 trees were made over free of royalty under the concession granted to that Company by the Supreme Government as shown in the subjoined statement. The timber required by this Company during the

remaining three years of their concession will, comparatively speaking, be much less than what was granted hitherto:—

Description of trees.	Number.	Rate.	Value.	Purpose for which used.		
				For sleepers.	For buildings.	For other purposes.
		Rs.	Rs.			
Reserved trees	[illegible]	6	14,202	902	1,072	393
Unreserved trees.....	5,103	2	10,206	1,149	2,040	1,914

The free grants, together with the timber and other produce shown in Statements Nos. 62 and 63, represent the total yield of the Assam forests in 1883-84.

Imports and exports of forest produce.

183. But very little timber is imported into Assam from foreign territory. The only district where this does occur is Goálpára, to which timber is brought from Bhutan, partly in the shape of logs and partly as boats or dugouts. The number imported during the year was 80 logs and 146 boats, as compared with 168 logs and 230 boats in the previous year.

184. Caoutchouc, or India-rubber, has been imported into Assam from the following countries:—

	1882-83. Maunds.	1883-84. Maunds.
Bhutan	24	86
Towang	1,549	248
Dafla Hills	535	221
Naga and Mishmi Hills	1,709	828
Lushai	601	135
Manipur	168	124
Total	4,586	1,642

The export of caoutchouc or India-rubber by steamer from the different districts in Assam was the following:—

	1882-83. Maunds.	1883-84. Maunds.
From Goalpara	615	1,484
,, Kamrup	605	80
,, Darrang	2,152	2,621
,, Nowgong	1,622	1,154
,, Sibsagar	428	684
,, Lakhimpur	3,241	3,289
,, Sylhet	666	462
,, Cachar	.....	15
Total ...	9,329	9,792

In addition to the above, five maunds were exported by boat from Goálpára and 447 maunds in the same way from Sylhet.

185. The imports and exports of other forest produce to and from Assam, as registered at Dhubri on the Brahmaputra and Bhairab Bázár on the Megna, are shown in the following table:—

Name of forest produce.	Denomination.	Registered at Dhubri				Registered at Bhairab Bázár			
		Imports		Exports		Imports.		Exports.	
		By boat	By steamer	By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.
Timber	No.	...	2,721	344,103	342	...	622	2,907	...
Caoutchouc (rubber)	Mds.	...	33	5	9,315	...	...	447	477
Lac-dye	,,	...	.....	233	2,877	...	84	.....	41
Shell and button lac	,,	...	.....	2,144	.....	...	...	130	...
Stick lac	,,	...	.....	1,353	44,466	...	...	.....	508
Bamboos	No.	...	.....	6,544	.....	...	...	749,500	...
Thatching-grass	,,	...	.....	11,285,200	.....	...	...	.....	...
Reeds (ekra nol).....	,,	...	.....	33,383	.....	...	...	.....	...
Canes	,,	...	.....	269,060	.....	...	...	2,499	4

These figures, if compared with those given in paragraph 148 of last year's report, show that the imports of timber have been decreasing, whilst the exports, including bamboos, have been increasing both in the Brahmaputra and Surma Valleys, and this the Conservator has no doubt will be the case in future also, with judicious management, as trade in the country develops; but still, as the timber trade is entirely in the hands of the natives, and the transport of it on the Upper Brahmaputra has to contend with considerable difficulties, and as the kinds of timber in the upper part of the Brahmaputra Valley are as yet not much known, and native timber traders in Lower Bengal have a great prejudice against all wood except Sál and Teak, no very rapid or sudden expansion of the export timber trade must be expected.

The timber imported consists almost exclusively of tea-boxes, which no doubt will decrease steadily and would have ceased before now, if it had not been for the great cost of labour in Assam, but the employment of steam power and sawing machinery on tea estates is gradually overcoming this difficulty.

Of rubber 33 maunds were again registered at Dhubri as imported into the Province. This can only be rubber collected in the Gáro Hills taken to Dhubri for shipment or to Marwári traders in that place on account of advances made by them.

The exports of thatching-grass, reeds, and canes has slightly decreased.

CHAPTER

Financial Results.

General

186. The revenue collected by the Forest Department in Assam in the year under report has been less than that of the previous year by Rs. 37,160. The receipts in 1882-83 were abnormally high and an equally large revenue had not been expected, still the Conservator had hoped for larger receipts than those actually collected, which hope was not realised, because the timber trade became very dull, only few merchants having come to Assam from Bengal last season, which caused a decrease in the receipts on account of timber removed by purchasers amounting to Rs. 23,040.

Another cause, to which the falling off in the receipts is largely due, is the fact that nearly all the timber stock worked out by the Department and remaining in sale depôts, was disposed of in 1882-83, and Rs. 17,533 realised, whilst in the year under report Rs. 1,775 only were collected on this account, since no more timber remained in the depôts for sale and departmental operations had been entirely discontinued.

187. The expenditure has increased by Rs. 27,739, of which Rs. 14,713 were under "A—Conservancy and Works," and Rs. 13,026 under "B.—Establishments."

These increases must be ascribed entirely to the natural expansion of forest conservancy in the Province, in the way of better and more works of protection and improvement. The increase under the head of "Establishments" was incurred under the authority of the Chief Commissioner and the Supreme Government, after searching enquiry had been made into the necessity for larger establishments.

188. The tabular statement (Form No. 53) attached to this report, shows the receipts and expenditure of the year according to divisions under the prescribed service heads.

189. To be able to see at a glance the proportion of receipts and expenditure under each of the great heads, "I.—Departmental timber operations," "II.—Other revenue," "III.—Formation, protection, and improvement of forests," the Tabular Statement No. 57, annexed to this report, has been prescribed in paragraph 208 of the Forest Department Code.

The amount shown under the first of these heads in the first column of that statement includes receipts under "I.—Timber and other produce removed from the forest by Government agency," and those under "III.—Confiscated drift and waif wood," as also charges under "A I—Timber and other produce removed by Government agency," and those under "III.—Confiscated drift and waif wood."

The amounts shown in the second column, "Other revenue," of Statement No. 57, includes receipts under all other heads except those included in the first column, and charges under AII., IV., V., IX., one quarter of VI. and half of "B.—Establishments."

The amounts entered in the third column of "Formation, protection, and improvement of forests" does not include receipts, but only charges under AVII., VIII., three-quarters of VI., and half of "B.—Establishments."

A comparison of the totals in Statement No. 57 with those in 1882-83 is made in the subjoined statement:—

	1882-83.		1883-84.	
	Receipts Rs.	Charges. Rs.	Receipts. Rs.	Charges Rs
I—Departmental timber operations	20,208	1 093	4,453	1,302
II—Other revenue	2,28,307	58 639	2,06,992	68,931
III—Formation, protection, and improvement of forests	...	1,12,091	...	1,29,329
Total	2,48,605	1,71,823	2,11,445	1,99,562

Revenue

190. The following table shows the forest revenue collected during the year, as compared with 1882-83.—

Budget heads	1882-83.			1883-84.			Increase.			Decrease.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
I.—Timber and other produce removed from the forests by Government agency.	17,533	5	7	1,774	13	6	...			15,758	8	1
II.—Timber and other produce removed from the forests by consumers and purchasers.	2,20,316	12	8	1,97,276	8	11	...			23,040	3	9
III.—Confiscated, drift and waif wood	2,764	13	8	2,678	2	5	...			86	11	3
IV.—Revenue from forests not managed by Government.	5,342	13	2	7,379	10	3	2,036	13	1	...		
V.—Miscellaneous	2,647	4	9	2,335	8	0	...			311	12	9
Total.....	2,48,605	1	10	2,11,444	11	1	2,036	13	1	39,197	3	10

The decrease under "I.—Timber and other produce removed from the forests by Government agency" is the natural consequence of almost no timber having remained in the Government depôts at the end of the previous year and departmental timber works having been brought to a close, and for the same reason this decrease took place in those divisions only where timber works by Government agency had been carried on in former years."

Under "II.—Timber and other produce removed from the forests by consumers and purchasers," the decrease is large, Rs. 23,040; which is owing chiefly to stagnation in the timber trade in Lower Assam, brought about by the eagerness with which timber had been bought the year before, in greater quantities than the Bengal timber merchants could dispose of and consequently but few of them came in the year under report to buy, which in turn left much timber on the hands of the timber-cutters and thus made them unable and unwilling to buy more trees, as has already been fully stated in Chapter IV. of this report, under "Yield and working."

For this reason, the decrease in receipts happened principally under sub-head "A.—Timber" in the Gáro Hills, Goálpára, and Kámrúp divisions, particularly in the latter two, and was as follows.—

	Rs.
Gáro Hills division	1,581
Goálpára "	13,620
Kamrúp "	10,533
Total	25,734

There was also a large decrease of Rs. 7,063 in the Lakhimpur division under "II.E—Other minor produce," because the large amount of Rs. 9,675 arrear revenue had been realised in 1882-83 on account of rubber máháls, whilst in 1883-84 there were no arrears to collect. In the Darrang district Rs. 1,065 more were collected during the year on account of timber and firewood than in the previous year, and Rs. 1,029 less under "II.E—Other minor produce." The latter has to be attributed in the same way as above stated about the Lakhimpur division, not to short receipts in the year under report, but to the fact that in 1882-83 Rs. 1,963 arrears of revenue on rubber máháls were realised, whilst nothing was collected on account of outstandings in the year under report.

In Sylhet the decrease has been Rs 1,690, principally on account of short timber sales, whilst in Cachar there was an increase of Rs. 10,403 under this head, chiefly on account of the increased sale of third-class timber, on which the rate of royalty had been lowered.

The receipts from the sale of the rubber máháls have already been shown in detail in paragraph 167 of this report, so there is no need for repeating this information here.

The small decrease of Rs. 86-11-3, as shown in the above table under "III.—Confiscated drift and waif wood" requires no explanation.

Under "IV.—Revenue from forests not managed by Government," there has been an increase of Rs. 2,036-13-1, which is accounted for by the increase in duty collected on timber imported from Manipur and the Lushai Hills into Cachar, which came to Rs. 2,557, whilst there was a small decrease of Rs. 156 on account of timber imported from Bhutan into the district of Goálpára, as well as a decrease in the revenue collected in shared and private forests, amounting to Rs. 188 in the Khási Hills and Rs. 178 in the Gáro Hills.

The decrease of Rs. 312 under "Miscellaneous" is more or less accidental, and requires no explanation.

The increase and decrease in the revenue derived from the different descriptions of timber and other forest produce, in reserved as well as protected and district forests, according to divisions, as compared with the previous year, is shown in the fullest detail in Appendix XIV.

Expenditure

191. The subjoined table shows the expenditure during the year under report, as compared with that in the previous year:—

Budget heads.	1882-83.	1883-84.	Increase.	Decrease
A.—Conservancy and Works.				
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A P.
I.—Timber and other produce removed from the forests by Government agency	965 4 0	1,247 1 9	281 13 9	.....
II.—Timber and other produce removed from the forests by consumers and purchasers.	5,622 7 11	6,750 15 7	1,128 7 8	.....
III.—Confiscated drift and waif wood	128 13 10	54 7 0	.....	74 6 10
IV.—Revenue from forests not managed by Government.	.....	.....	.....	.....
V.—Rent of leased forests, and payments to shareholders in forests managed by Government.	.....	.....	.....	.....
VI.—Live and dead stock	9,476 1 3	14,353 14 3	4,877 13 0	.....
VII.—Communications and buildings.....	17,273 2 9	20,993 14 1	3,720 11 4	.....
VIII.—Demarcation, improvement, and extension of forests	39,762 11 4	43,110 4 7	3,347 9 3	.....
IX.—Miscellaneous	2,700 13 10	4,131 7 4	1,430 9 6	.....
Total of A.—Conservancy and Works	75,929 6 11	90,642 0 7	14,787 0 6	74 6 10
B.—Establishments.				
I.—Salaries	79,388 12 10	89,583 11 7	10,194 14 9	.....
II.—Travelling allowances	13,212 12 7	15,342 4 2	2,129 7 7	.....
III.—Contingencies	3,292 2 3	3,994 6 5	702 4 2	.....
Total of B.—Establishments	95,893 11 8	1,08,920 6 2	13,026 10 6	.....
Grand Total of Expenditure	1,71,823 2 7	1,99,562 6 9	27,813 11 0	74 6 10

The increase in expenditure by Rs. 282 under "AI.—Timber and other produce removed from the forest by Government agency" is explained by the working out of timber for the Divisional Officer's bungalow at Tura in the Gáro Hills and a slightly increased expenditure on account of the purchase of rubber in the same division. No timber or any other produce was worked out by the Department for the purpose of sale.

The small increase in expenditure of Rs. 1,128 which appears in the above table under the head of "A.II.—Timber and other produce removed from the forests by consumers or purchasers" is hardly capable of being explained; it occurred in the Gáro Hills, Kámrúp, Lakhimpur, and Cachar divisions and is principally accounted for by the payment of more commission on the sale of *gurkati* licenses and to mauzadars for the sale of timber in Upper Assam, as well as by a slight increase in the temporary establishment looking after timber works.

The decrease in expenditure by Rs. 74 under "III.—Confiscated drift and waif wood" is accounted for by smaller payment of salvage and rewards in the Darrang and Nowgong, Lakhimpur, and Cachar divisions.

The increase in expenditure by Rs. 4,878 under "A.VI.—Live and dead stock" is accounted for by the purchase of two elephants at a cost of Rs. 3,900 and a slight increase on account of the feed and keep of elephants, as well as the purchase of stores in the Darrang and Nowgong, Lakhimpur, and Cachar divisions.

The increase under "A.VII.—Communications and buildings" amounting to Rs. 3,721, as shown in the above table, is accounted for chiefly by the exceptional expenditure on account of the purchase of a bungalow for the Divisional Officer in Gauháti and a slight increase on account of buildings in the Goálpára and Darrang and Nowgong divisions, as well as an increased expenditure on road-work in the Gáro Hills, where a road to open out the valuable Dambu forest was commenced and also on road-work in the Kámrúp division, where they are badly wanted to make the forests more accessible. Under the head "VIII.—Demarcation, improvement, and extension of forests" there was an increased expenditure of Rs. 3,348, which occurred under the different sub-heads in the following proportion:—

		Rs.
(a)	Demarcation	3,651
(c)	Surveys and working plans	2,053
(e)	Protection from fire	885
(f)	Other works	112
	Total	6,651

The sub-heads under which there was a decrease were the following:—

		Rs.
(b)	Compensation	642
(d)	Plantations	2,661
	Total	3,303

The increase on account of demarcation and survey work is the natural consequence of these works having been pushed on with great energy; there is nothing more indispensable for the efficient protection of forest reserves than proper demarcation, since it would be most unreasonable to find fault with people for not respecting the rules made for such forests if the areas were not well defined and the increase of expenditure is therefore fully justified; it continues only to be heavy whilst the first demarcation of forests is going on.

The increased expenditure of Rs. 835 on account of fire-protection is very small, if compared with the extra amount of work done in the year, as described in Chapter III. of this report.

Under the sub-head "(f) Other works" a great variety of minor operations in the forests are charged, and, considering the increase is only Rs. 112 for the whole Province, it must be attributed to the expansion of forest improvements generally. The only divisions in which this expenditure is heavy are Sibságar and Cachar; in the former on account of the experimental plantation work in the Nambor forest, and in the latter on account of temporary establishments in the North Cachar Hills as well as in the plains. The decrease under sub-head "(b) Compensation" is accounted for by smaller payments in the Gáro Hills on account of the removal of houses from the reserves than were made in the previous year. The decrease under "Plantation work" has to be attributed to the restricted work in the Charduár Rubber plantation.

The increase under "IX.—Miscellaneous" occurred entirely under the sub-head "(a) Refunds," and, since this in reality is no expenditure at all, but merely a book entry, explanations are unnecessary. The amount is made up by a refund of Rs. 1,000 paid into the Kámrúp forest office for the right to fell Sál-trees in a particular locality, where on inspection no mature trees fit for felling were found and in the Cachar division a refund of Rs. 1,050 was made on account of revenue for elephant mahále, which had erroneously been credited by the Deputy-Commissioner of the district to "Forests," instead of to "Miscellaneous land revenue."

192. Under "B.—Establishments" there has been a total increase of Rs. 13,027, of which Rs. 10,195 came under "I.—Salaries." This increase is distributed under the different sub-heads as follows:—

		Rs.
(a)	Conservator	541
(b)	Superior officers	3,587
(c)	Subordinate Establishments	5,113
(d)	Office Establishments	613
(e)	Deputation and special allowances	341
	Total	10,195

The increase in the Conservator's pay is accounted for by an officiating allowance in a higher grade having been drawn for two months. The increase on account of the pay of superior officers is accounted for by the promotion of Messrs. Jelliçoe and Mein to a higher grade.

The increase in the pay of subordinate establishments is accounted for by the transfer of a considerable number of these men from the temporary to the permanent establishment, with the sanction of the Chief Commissioner and the Government of India, whilst the increase under "(d) Office establishments" is due to an increase of pay granted to the clerks in this department in the year under report.

The increase in deputation and special allowances is explained by the circumstance that the Gáro Hills allowance was drawn for the whole year, whilst in 1882-83 it was drawn for less than seven months.

The increase in travelling allowance is accounted for by the more liberal allowance now sanctioned by Government in the new Civil Travelling Allowance Code.

Under "III.—Contingencies" the increase occurred chiefly under sub-head "(e) Official postage" in the Conservator's office and that of the Lakhimpur division, and sub-head "(f)

Sundries" in all the divisional forest offices, except those of Darrang and Nowgong and Sibságar and has to be attributed to the general increase of office work mainly caused by the transfer of such forest business as was formerly done in the offices of the Deputy-Commissioners and by the direct control now exercised by Forest Officers over the district forests.

Surplus and deficit according to divisions

193. The receipts and expenditure in the different divisions and their surplus or deficit were as follow:—

Name of division	Receipts.			Expenditure.			Surplus.			Deficit.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Direction	17	9	0	25,545	12	6	.....			25,528	3	6
Gáro Hills division	16,479	11	0	21,000	10	8	.....			4,520	15	8
Goálpára "	34,867	14	6	29,544	4	7	5,323	9	11	.....		
Kámrúp "	54,905	8	5	37,331	2	2	17,574	6	3	.....		
Darrang and Nowgong division	33,823	3	0	21,143	7	2	12,679	11	10	.....		
Sibságar division	8,245	6	0	17,283	2	6	.....			9,037	12	6
Lakhimpur division	15,617	10	0	21,351	1	1	.....			5,733	7	1
Cachar division	34,913	6	5	21,130	9	3	13,782	13	2	.....		
Sylhet "	6,558	0	9	882	0	0	5,676	0	9	.....		
Khási and Jaintia Hills division	5,204	6	0	4,350	4	10	854	1	2	.....		
Nága Hills division	812	0	0	.....			812	0	0	.....		
Total	2,11,444	11	1	1,99,562	6	9	56,702	11	1	44,820	6	9

From these figures it will be seen that there has been a decrease in the receipts, as compared with the previous year, in every division, except Cachar and the Khási Hills, which is, as already explained, due to the fact that the year 1882-83 was a very exceptionally favourable one in this respect and the dull state of the timber trade in the year under report; whilst the expenditure has increased as compared with the previous year more or less in all the divisions, except Darrang and Nowgong and the Khási and Jaintia Hills. In some the increase has been very slight, but in others, as Goálpára and Kámrúp, it has been considerable on account of the extra amount of work done, which is also the reason that the Gáro Hills and Lakhimpur divisions are showing a deficit instead of a surplus, as was the case last year.

In all forest divisions in this Province there is as yet a great deal of work to be done connected with the first organisation of a proper system of forest conservancy, such as road-work and buildings, as well as demarcation of forests, the expenditure on which will gradually become less, and the fruit of such labour can only be hoped for in course of time. Nevertheless it would have to be regretted, as often stated before, if such works were to be delayed because the forest income in the Province is as yet small.

Value of stock at the end of the year.

194. The value of stock at the close of the year was Rs. 12,190 more than at the commencement.

Outstanding revenue

195. Statement 56 attached to this report shows the amount of revenue outstanding at the close of the year to be Rs. 29,987 as compared with Rs. 43,519 outstanding at the close of 1882-83, the receipt of which is all secured, as the sale of the timber on which this revenue is due will not be allowed until all is realised.

CHAPTEI VI.

GENERAL REMARKS.

Establishments

196. The superior staff of the department remained the same as in the previous year. Mr. Mein was appointed permanently to the third grade of Deputy-Conservators, Mr. Fordyce promoted to the second grade of Assistant-Conservators, and Mr. Copeland confirmed in his officiating appointment of Assistant-Conservator, third grade.

197. One forest-ranger, Babu Jogesvar Sur and one forester, Babu Dina Nath Kar, returned from the Forest School with recommendations from the Director for advancement; the former has been appointed to officiate as Sub-Assistant-Conservator, whilst the latter was promoted to forest-ranger.

Forest-ranger Babu Tarakisor Gupta was sent to the Forest School and is prosecuting his studies with credit.

Conservator's Tour.

198. The Conservator left head-quarters on the 10th of November 1883, reached Gauháti the next day, and, after having considered and discussed forest work in the Kámrúp division with Mr. Mein, the Divisional Officer, proceeded to Goálpára, which place was reached on the 20th and the Bijni Duárs on the 25th, where Mr. Jellicoe, the Officer in charge of the Goálpára division, was met and the proposed Bijni reserve, as far as the foot of the Bhutan Hills, inspected the two following days. On the 28th November, the Conservator, in company with Mr. Jellicoe, travelled to Sidli, on the 29th to Garubasa, where the books of the forest-ranger in charge of the Sidli range and fire-protection work in the Sidli reserve were inspected. On the 1st and 2nd of December the Chirang reserve was inspected up to the foot of the Bhutan Hills and the localities where timber works were carried on visited. On the 3rd and 4th the Guma reserve and fire-protection works in and around this forest were inspected, after which the Conservator travelled to Dhubri, inspected the divisional office on the 9th and 10th and the following day left for Calcutta to visit the Exhibition. On the 17th the Conservator returned to Dhubri, and, after having disposed of correspondence and inspected the office of the Registrar of river-borne traffic, started on the 22nd for the Gáro Hills, reached Tura on the 25th, inspected the divisional office on the 28th and 29th and left in company with Mr. Copeland, the Divisional Officer, on the 31st, for the Rongrengiri reserve, which latter was inspected on the 2nd and 3rd of January 1884, the Songsak proposed reserve on the 4th, the Darugiri reserve on the 5th, the Dambu reserve on the 6th and on the three following days the line along which the Dambu-Damra road was to be constructed. On the 10th, the Rajasimla and Ildek reserves were inspected and on the following day the Conservator left the Gáro Hills on his way to the Kámrúp division, where the Singra range was reached and Mr. Mein, the Divisional Officer, met on the 15th, the Jharikhuri, Bura Gohain, and Mugakhal forests inspected, and the Kulsi plantation reached the next day. Here the different plantations and fire-protection works were inspected on the 17th and 18th, the fire-protection work of the Borduár reserve and demarcation work at the Pantan reserve the next day and on the 20th Borduár was left and the fire-protection and the demarcation works of the Jara reserve inspected and Rani reached, where the books of the forester in charge of the Rani range were inspected. On the 21st, the Conservator reached Gauháti, consulted with the Deputy-Commissioner about one of the departmental elephants which had killed a man, inspected the divisional office on the 22nd and 23rd and started on the 25th for Shillong, which was reached on the following day. On the 6th of February the Conservator left Shillong again for Sylhet. The latter station was reached on the 8th, and forest work discussed with the Deputy-Commissioner on the following day, forest accounts of the Deputy-Commissioner inspected on the 11th, and, after having disposed of correspondence, the Conservator left on the 14th, *en route* for Cachar. Badarpur was reached on the 16th, and the books at the Syaltek revenue station inspected the same day, after which Silchar was reached on the 18th, forest business discussed with the Deputy-Commissioner and some pressing office work disposed of during the four following days, then the divisional office was inspected on the 23rd, the Sonaimukh revenue station visited on the 24th and Silchar left in company with Mr. Young, the Divisional Officer, on the 25th for the Katakhal reserve, the Matijuri revenue station inspected on the 26th, the northern part of the Katakhal reserve and road-work there inspected on the 27th and the Dhaleswari reserve reached on the 29th and land to be given up for cultivation within that reserve inspected. On the 1st of March the Conservator inspected the Dhaleswari reserve, and travelled as far as the Rupatang guard on the

Chattacnura range, where he was met by the Tahsildar of Partabgarh and in company with the latter travelled the next day to Durgabund and inspected the district protected forests in the Singla Valley on the 2nd and those in the Langai Valley on the 3rd and 4th, after which Karimganj was reached on the 6th, where the Conservator discussed forest business with the Assistant-Commissioner of that sub-division. Karimganj was left on the 8th and Sylhet reached on the return journey the following day, Therriaghát on the 15th and Shillong on the 16th. On the 29th the Conservator left Shillong again and reached Tezpur on the 1st of April, where forest matters were discussed with the Deputy-Commissioner of the district and the Divisional Officer, Mr. Campbell; on the 4th Tezpur was left for Bhairabighat, the divisional office inspected the next day, and the fire-protection work, as well as the new roads opened out in the Bálipára reserve as far as Bhalukpung, inspected on the 6th in company with Mr. Campbell, the Charduár plantation on the 7th, and on the 8th the Conservator returned to Tezpur, which station could not be left until the 11th for want of a steamer. Dibrugarh was reached on the 12th, forest business discussed with the Deputy-Commissioner of the district, correspondence disposed of on the two following days and the divisional office inspected on the 15th and 16th. On the 17th Dibrugarh was left in company with Mr. Barker, the Divisional Officer, for the Upper Dehing forest, in which some of the demarcation work was inspected the same day. On the 18th the control station on the Dibru river in the Upper Dehing forest, about 3 miles from Borbil, was inspected, and Margherita reached the same day, the Ledu and Tikock coal-mines visited on the 19th, the experimental Teak plantation near Makum and the Namsang forest inspected on the 20th, when Jaipur was also reached. On the 21st the Conservator left the Lakhimpur district and reached Sapákata in the Sibságar district, where the district forest along the foot of the Nága Hills was inspected during the two following days and Sibságar reached on the 24th, forest matters discussed with the Deputy-Commissioner and the Divisional Forest Officer, Mr. Fordyce, correspondence disposed of on the 25th and 26th, the divisional office inspected on the 27th, and Sibságar left again on the 28th, Jorhát reached on the 29th and Golághát on the 1st of May. Here the Assistant-Commissioner was consulted about the rules regarding drift wood on the Dhansiri river, the books of the forest-ranger in charge of the Golághát range inspected and Golághát left the next day, when the experimental plantations in the Nambor forest were inspected and Dimapur reached on the 4th. From there the Conservator travelled to Mohungdijua, inspecting the forests in that part of the Nága Hills district and reached the Deboka reserve on the 9th; here fire-protection and demarcation works, as well as the proposed additions to this reserve and land adjoining it, which had been applied for for cultivation, were inspected. Nowgong was reached on the 11th May, the books of the forest-ranger in charge of the Nowgong range inspected the next day, the Kholahat reserve and the fire-protection works around it visited on the 13th and the proposed reserves in that neighbourhood on the 14th, after which the Conservator returned to head-quarters, which were reached on the 17th of May

The Conservator was absent on tour for 171 days, and his camp for 204 days in the year under report.

Services of Officers.

199. Mr. J. T. Jellicoe was in charge of the Goálpára division during the whole year; he has given much more personal attention to the works in his charge and the Conservator is glad to record that his management has, on the whole, much improved. Mr. Jellicoe was absent from head-quarters in the forests for 135 days in the year.

Mr. A. J. Mein was in charge of the Kámrúp division, except the last ten days of the year. The steady and conscientious way in which he carries out his duties is beyond all praise. Mr. Mein was absent from head-quarters in the forests for 170 days during the time he was on duty.

Mr. E. Ludlow was in charge of the Lakhimpur division from the commencement of the year until the 13th of July 1883, when he was removed and placed in charge of the Gáro Hills division. The latter he held until the 21st of December 1883, after which date he was attached to the Goálpára division. He has done next to no work; his conduct has formed the subject of a separate report, so no further remarks are necessary. The number of days Mr. Ludlow was absent from head-quarters are not known, as he has submitted diaries for only a very few days in the year.

Mr. C. G. D. Fordyce has had charge of the Sibságar division for the whole year and has managed it satisfactorily and more thoroughly than before. He was promoted to second-grade Assistant-Conservator during the year under review. Mr. Fordyce was absent from head-quarters in the forests for 155 days in the year.

Mr. F. S. Barker was in charge of the Cachar division from the commencement of the year until the 18th of May 1883, when he made over charge to Mr. Young on return of the latter from special duty in the North Cachar Hills. After this, Mr. Barker remained attached to the Cachar division until the 13th of July 1883, when he took over charge of the Lakhimpur division. Mr. Barker has displayed very little zeal up to date and he leaves far too much to his subordinates. Mr. Barker was absent from head-quarters in the forests for 145 days in the year.

Mr. D. P. Copeland had charge of the Gáro Hills division from the commencement of the year until the 8th of June 1883, when he left for the Forest School at Dera Dun, on return from which he again received charge of the Gáro Hills division. He is a very active and zealous officer and has shown much tact in his dealings with the people in the Gáro Hills. Mr. Copeland was confirmed in his officiating appointment of Assistant-Conservator, third grade. Mr. Copeland was absent from head-quarters for 137 days during the 162 days he was on duty in this Province.

Mr. Young has been in charge of the Cachar division, from the 18th of May 1883 until the close of the year; he attends properly to his office work at head-quarters, but is sadly deficient in his supervision of work in the forests, which is a most serious defect in a Forest Officer and his subordinates and workpeople are not slow in taking advantage of it. Mr. Young was absent from head-quarters for 152 days in the year.

Mr. T. J. Campbell was in charge of the Darrang and Nowgong division during the whole year. He continues to be a very zealous officer and manages the forests in the two districts in his charge satisfactorily; he was also favourably mentioned in the Chief Commissioner's despatch regarding the Aka Expedition for the assistance he gave. Mr. Campbell was absent from head-quarters for 243 days in the year.

Of the forest-rangers, Babus Jay Narayan Dás, Srigopal Banerji, Paniram Dás, and Kripa Nath De have worked best.

ANNUAL STATEMENTS

AND

APPENDICES.

FORM No. 49.

Forest Department, Assam.—Area of Reserved Forests, 1883-84.

Division or Range.	Civil district or territory.	Name of forest.	Area on 1st April 1883. Acres.	Area on 1st April 1883. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1884. Acres.	Area on 31st March 1884. Equivalent in square miles.	Number and date of Notification of addition or transfer.
Gáro Hills division	Gáro Hills district	Dibru Hill	.....	....	6,080	....	6,080	9	No. 28, dated 19th June 1883.
		Jinari	.....	....	6,640	....	6,640	10	Ditto.
		Chima and Bangshi	.....	....	8,680	....	8,680	14	Ditto.
		Bhima	.....	....	5,760	....	5,760	9	Ditto.
		Dilma	.....	....	1,120	....	1,120	2	Ditto.
		Rajasimla	.....	....	4,800	....	4,800	7	Ditto.
		Iidek	.....	....	1,280	....	1,280	2	Ditto.
		Darngiri	.....	....	2,283	....	2,283	4	Ditto.
		Rangrengiri	.....	....	8,480	....	8,480	13	Ditto.
		Emangiri	.....	....	2,080	....	2,080	3	No. 44, dated 7th November 1883.
		Rewak	.....	....	1,280	....	1,280	2	Ditto.
		Siju	.....	....	1,280	....	1,280	2	Ditto.
		Bolsalgiri	.....	....	640	....	640	1	Ditto.
		Tura	.....	....	480	....	480	1	Ditto.
Goálpára ditto	Goálpára ditto	Bijni Duár	8,038	12	.....	....	8,038	13	
		Chirang Duár No. 1	69,203	108	.....	....	69,203	108	
		Ditto No. 2	90,643	142	.....	....	90,643	142	
		Ripu Duár	41,632	65	.....	....	41,632	65	
		Guma Duár	15,776	25	.....	....	15,776	25	
		Sidli Duár	43,757	68	.....	....	43,757	68	
		Jengasi Charaidaka	1,730	3	.....	....	1,730	3	
		Atiabari	9,180	14	.....	....	9,180	14	
		Bengtol and Darogaon	.....	....	7,094	....	7,094	11	No. 32, dated 25th July 1883.
		Bhumesvar Hill	.....	....	4,576	....	4,576	7	
Kámrúp ditto	Kámrúp ditto	Barduár	16,260	25	.....	....	16,260	25	
		Pantan	21,910	34	.....	....	21,910	34	
		Matalkhar	2,240	3	.....	....	2,240	4	
		Kulsi plantation	3,680	6	.....	....	3,680	6	
		Jara	1,037	2	.....	....	1,037	2	
		Milmilila	3,610	6	.....	....	3,610	6	
		Mayang	4,800	7	.....	....	4,800	7	
		Rani	11,070	17	.....	....	11,070	17	
		Kawa-ing	3,570	6	.....	....	3,570	6	
		Simla Hill	317	1	.....	....	317	....	
		Dumpara	497	1	.....	....	497	1	
		Khaksi, Sikrabura Hill	2,530	4	.....	....	2,530	4	
		Ghoraputi	120	....	.....	....	120	....	
		Khatkhati Hill	644	1	.....	....	644	1	
		Tareibari	806	1	.....	....	806	1	
		Garubaldha	240	....	.....	....	240	....	
		Khurkhuri	149	....	.....	....	149	....	
		Sarsuria Hill	245	....	.....	....	245	....	
		Gizang	930	2	.....	....	930	1	
		Jaipur	774	1	.....	....	774	1	
		Baradobha	1,190	2	.....	....	1,190	2	
		Nampathar	640	1	.....	....	640	1	
		Barjuli	1,120	2	.....	....	1,120	2	
Darrang and Nowgong division.	Nowgong ditto	Hajo	.....	....	226	....	226	....	No. 36, dated 25th August 1883.
		Kholahat	1,878	3	.....	....	1,878	3	
		Deboka	520	1	.....	....	520	1	
		Diju	2,730	4	.....	....	2,730	4	
	Darrang ditto	Bálipára	56,224	88	.....	....	56,224	88	
		Khaling Duár	6,240	10	.....	....	6,240	10	
		Addition to Khaling Duár	6,972	11	.....	....	6,972	11	
		Charduár	51,200	80	.....	....	51,200	80	
		Bhamaraguri	386	1	.....	....	386	1	
		Garumari	205	....	.....	....	205	....	
		Nowduár	52,480	82	.....	....	52,480	82	
		Singri Hill	1,200	2	.....	....	1,200	2	
Sibságar ditto	Nága Hills ditto	Nambor	249,312	390	.....	....	249,312	390	
		Mikir Hill	51,840	81	.....	....	51,840	81	
		Upper Dalgurung	5,312	8	.....	....	5,312	8	
		Lower "	5,120	8	.....	....	5,120	8	
	Sibságar ditto	Holongapar	4,892	8	.....	....	4,892	8	
		Dirai	11,773	18	.....	....	11,773	18	
		Abhaypur	15,911	25	.....	....	15,911	25	
		Sola	1,661	3	.....	....	1,661	3	
		Desai	.....	....	6,893	....	6,893	11	No. 45, dated 21st November 1883.
		Jhansi	.....	....	18,380	....	18,380	29	
Cachar ditto	Cachar ditto	Upper Jiri	15,360	24	.....	....	15,360	24	
		Lower "	8,960	14	.....	....	8,960	14	
		Barak	42,880	67	.....	....	42,880	67	
		Sonai	11,520	18	.....	....	11,520	18	
		Katakhal	51,200	80	.....	....	51,200	80	
		Dhaleswari	21,120	33	.....	....	21,120	33	
Khási and Jaintia Hills division.	Khási and Jaintia Hills district.	Inner Line	325,760	509	.....	....	325,760	509	
		Salpung	32,000	50	.....	....	32,000	50	
		Total	1,392,994	2,177	88,052	....	1,481,046	2,314	

Area of Unreserved Forests, 1883-84.

		Protected Forests.							
Kámrup division	Kámrúp district	Jhari Khuri	1,235	2	.....	....	1,235	2	
		Bura Gohain	620	1	.....	....	620	1	
		Mogakhal	180	....	.....	....	180	....	
Sibságar "	Sibságar "	Panidehingia	19,200	30	.....	....	19,200	30	
		Bharolwah	5,280	8	.....	....	5,280	8	
Lakhimpur "	Lakhimpur "	Kuddum	15,866	25	.....	....	15,866	25	
		Parapara	26,720	42	.....	....	26,720	42	
		Upper Debing	151,584	237	.....	....	151,584	237	
		Dehingmukh	13,747	21	.....	....	13,747	21	
		Jokai	12,954	20	.....	....	12,954	20	
Sylhet "	Sylhet "	Solagurí	68,122	106	.....	....	68,122	106	
Cachar "	Cachar "	Langai and Singla	108,800	170	.....	....	108,800	170	
		North Cachar	.....	....	128,000	....	128,000	200	No. 9, dated 3rd April 1884.
		Total	428,308	662	128,000	.....	552,308	862	
		District Forests.							
Goálpára "	Goálpára "	Within revenue limits	153,600	240	.....	11,670*	141,930	222	
Kámrup "	Kámrup "	" " "	322,818	504	.....	236*	322,582	504	
Darrang and Nowgong division.	Darrang "	" " "	130,556	204	.....	1,005†	129,551	202	
	Nowgong "	" " "	221,957	346	.....	....	221,957	347	
Sibságar "	Sibságar "	" " "	259,588	405	.....	25,922‡	233,666	365	
Lakhimpur "	Lakhimpur "	" " "	1,302,508	2,035	.....	1,962†	1,300,546	2,032	
Cachar "	Cachar "	" " "	51,118	80	.....	923†	50,195	78	
Sylhet "	Sylhet "	" " "	62,165	97	.....	177†	61,988	97	
Gáro Hills "	Gáro Hills "	Beyond " "	224,000	351	.....	50,883§	173,117	271	
Lakhimpur "	Lakhimpur "	" " "	960,000	1,500	.....	....	960,000	1,500	
Cachar "	Cachar "	" " "	263,040	411	.....	128,000§	135,040	211	
Khási and Jaintia Hills division.	Khási and Jaintia Hills district.	" " "	64,000	100	.....	....	64,000	100	
Nága "	Nága "	" " "	315,328	493	.....	....	315,328	493	
		Total	4,330,678	6,766	.....	220,768	4,109,910	6,422	

* Declared reserves. † Waste land grants. ‡ 25,273 acres declared reserve and 649 acres on account of waste land grants. § Declared protected forests.

FORM No. 50.

FOREST DEPARTMENT, ASSAM.—AREA OF PLANTATIONS, 1883-84.

Division.	Name of plantation.	On 1st April 1883.		Added during 1883-84.		On 31st March 1884.	
		Area.	Cost.	Area.	Cost.	Total area.	Total cost.
Regular plantations.	*Kutsi plantation.*	Acres.	Rs.	Acres.	Rs.	Acres.	Rs
Kámrúp	Caoutchouc	101	7,911	21	1,243	122	9,154
	Teak	168	15,395	.....	556	168	15,951
	Sissu	20	2,248	.....	102	20	2,350
	Bamboo	2	106	.....	206	2	312
	Cinchona	.....	7	.....	4	.....	11
	Add cost of nursery work	.....	165	.....	261	.....	426
	Collection and despatch of seed	.....	22	.....	124	.....	146
	Miscellaneous experiments in planting	.....	35	.....	76	.....	111
	Total	291	25,889	21	2,372	312	28,461
Darrang and Nowgong	*Charduár plantation.* Caoutchouc	892	64,351	.....	4,742	892	69,093
	Bamuni Hill plantation. Caoutchouc	9	1,982	.....	50	9	2,032
	Total	901	66,333	.....	4,792	901	71,125
Lakhimpur	*Makum plantation.* Teak	2	1,326	.....	.....	2	1,326
	Total	2	1,326	.....	.....	2	1,326
Khási and Jaintia Hills	Shillong timber plantation	8	3,033	.....	632	8	3,665
	Total	8	3,033	.....	632	8	3,665
	Total regular plantation	1,202	96,581	21	7,996	1,223	1,04,577
Cultural operations. Sibságar	Nambor timber plantation	60	3,751	13	1,405*	73	5,156
	Total cultural operations	60	3,751	13	1,405	73	5,156
	Grand Total	1,262	1,00,332	34	9,401	1,296	1,09,733

* Charged under A, VIII. f.

FORM No. 51.

FOREST DEPARTMENT, ASSAM.—AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON OF 1884.

Division	Forest tracts.	Up to 30th June 1883.		During dry season of 1884.				Total cost up to 30th June 1884.	Year in which protection commenced.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.		
	Goalpára District.	Acres	Rs.	Acres	Acres.	Acres.	Rs	Rs.	
Goalpára	Sidli	29,764	6,334	32,334	17,280	15,044	1,482	7,816	1876-77
	Chirang	...	135	...	...	...	...	135	"
	Gumá	1,280	4,816	15,776	15,136	640	2 417	7,233	"
	Panbari and Pechadavery	300	144	3,290	640	2,650	126	269	1875-76
	Kámrúp District.								
Kam.	Bárlnár	13,910	4,612	12 400	...	12,400	851	5,463	1873-74
	Pantan	9,400	2,234	10,961	...	10,961	300	2 534	"
	Mataikhar	2,120	1,928	1,780	...	1 780	830	2,258	"
	Kujsi	640	3,697	2,349	...	2,349	700	4,397	"
	Jara	950	1,316	820	...	820	120	1,439	"
	Mílmillia	1,875	1,236	2,710	...	2,710	200	1,436	1874-75
	Mayang	4,700	28	4,800	...	4,800	49	77	1882-83
	Rani	10,000	56	10,000	6,000	4,000	21	77	"
	Kawa Sing	3,490	45	3 260	...	3,260	110	155	"
	Singra	4,755	56	5,000	...	5,000	49	105	"
	Darrang District.								
Darrang and Nowgong	Bálipára	4,000	3,617	4,870	16	4,854	202	3,819	1873-74
	Garumari	180	409	180	...	180	35	444	1874-75
	Chardnár	803	294	892	...	892	17	311	1878-79
	Bamoni Hill	8	149	9	...	9	20	169	"
	Khaling Duár	...	...	13,212	16	13,196	3	3	1883-84
	Nowgong District.								
	Kholahat	1,878	1,305	1,878	...	1,878	229	1,534	1873-74
	Dekuka	520	813	520	3	517	212	1,028	"
	Diju	2,500	711	2,730	15	2,715	231	942	1879 80
	Khási and Jaintia Hills District.								
Khási and Jaintia Hills	Shillong	3,618	6,956	3,618	...	3,618	960	7,916	1874-75
	Riat Khwan	960	837	960	10	911	823	1,660	1881-82
	Total	97,651	41,783	134,039	39,125	94,914	9,486	51,219	

Charged in previous years		40,503
Ditto in 1882 84		9,542
Ditto in 1884-85	Goalpára division	479
	Kamrúp "	351
	Darrang and Nowgong division	184
	Khási and Jaintia Hills "	240
	Total	51,219

FORM No. 52,

FOREST DEPARTMENT, ASSAM.—PROSECUTIONS FOR BREACHES OF FOREST RULES DURING 1883-84.

Forest Division and Civil District.	Cases pending from 1882-83.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases	Persons.	Cases.	Persons.	Cases.	Persons.	
Gáro Hills division—														
Gáro Hills district	1	..	6	..	3	9	10	7	21	2	1	9	22	1
Goalpára division—														
Goalpára district	1	1	..	..	1	2	3	2	4	1	2	3	6	
Kámrúp division—														
Kámrúp district	..	..	2	..	1	3	3	1	2	2	4	3	6	
Darrang and Nowgong division—														
Darrang district	..	1	..	..	2	3	3	3	9	..	1	3	10	
Nowgong "	..	1	6	..	..	7	7	2	3	5	6	7	9	
Sibságar division—														
Sibságar district	..	..	18	..	..	18	18	6	..	6	.	12	..	6
Lakhimpur division—														
Lakhimpur district	1	..	25	..	3	28	29	28	60	8	33	36	93	3
Cachar division—														
Cachar district	..	..	2	..	1	3	3	..	..	1	3	1	3	2
Sylhet division—														
Sylhet district	..	..	.	..	3	3	3	1	1	2	2	3	3	..
Total	3	3	69	.	14	86	89	50	100	27	52	77	152	12

FOREST DEPARTMENT, ASSAM.—SUMMARY OF REVENUE AND EXPENDITURE OF THE DIFFERENT DIVISIONS, 1883-84

Budget heads.	Direction.	Gáro Hills Division.	Goálpára Division.	Kámrúp Division.	Darrang and Nowgong Division.	Sibsagar Division.	Lakhimpur Division.	Cachar Division.	Sylhet Division.	Khási and Jaintia Hills Division.	Nága Hills Division.	Total.
RECEIPTS.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I Timber and other produce removed from the forests by Government agency—												
a. Timber	.....	.....	.....	252 0	744 15 6	23 0 0	.....	.....	.....	.....	.....	1,019 15 6
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e Grass and other minor produce	.....	754 14 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	754 14 0
II. Timber and other produce removed from the forests by consumers or purchasers—	.....	5,658 6 0	.....	.....	.....	.....	.....	2,649 0 0	3,794 12 0	.....	.....	12,102 2 0
a. Timber	.....	9,422 4 3	33,407 14 0	50,939 2 0	9,162 9 6	6,767 13 0	7,932 4 0	23,156 8 3	1,383 9 9	1,624 11 0	12 0 0	1,43,808 11 9
b. Firewood and charcoal	.....	.....	12 12 0	158 14 0	1,040 1 0	577 0 0	681 14 0	706 11 3	.....	.....	.....	2,577 5 0
c. Bamboos	.....	.....	131 6 0	13 4 0	18 8 0	15 12 0	83 8 0	1,319 0 0	892 1 3	.....	.....	2,473 7 3
d. Grazing and fodder grass	.....	74 0 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	74 0 0
e. Other minor produce	.....	3 0 0	531 15 9	1,933 12 0	22,461 7 0	265 6 2	6,574 0 0	2,216 0 0	371 12 0	783 10 0	800 0 0	36,240 14 11
III. Confiscated, drift and waif wood	.....	64 12 0	65 8 0	1,168 6 0	335 2 0	59 9 9	.....	883 4 8	101 8 0	.....	.....	2,678 2 5
IV. Revenue from forests not managed by Government—												
a Duty on Foreign Timber and other Forest Produce	.....	.....	43 8 0	.....	.....	267 0 0	37 0 0	3,902 5 0	.....	.....	.....	4,249 13 0
b. Revenue from shared and private forests	.....	449 15 3	.....	.....	.....	.....	.....	.....	.....	2,679 14 0	.....	3,129 13 3
V Miscellaneous—												
a Fines and forfeitures	.....	6 8 0	112 0 0	130 2 0	58 0 0	17 0 0	.....	10 0 0	.....	.....	.....	333 10 0
b Refunds	17 9 0	2 6 6	32 11 9	0 2 0	.....	.....	8 0 0	0 2 0	.....	.....	.....	60 15 3
c. Other sources	.....	43 9 0	530 3 0	309 14 5	2 8 0	252 12 4	1 0 0	670 7 3	14 5 9	116 3 0	.....	1,940 14 9
Total Receipts	17 9 0	16,479 11 0	34,867 14 6	54,905 8 5	33,823 3 0	8,245 6 0	15,617 10 0	34,913 6 5	6,558 0 9	5,204 6 0	812 0 0	2,11,444 11 1
EXPENDITURE.												
A.—CONSERVANCY AND WORKS.												
I. Timber and other produce removed from the forests by Government agency—												
a. Timber	.....	696 4 6	.....	76 14 3	117 1 0	10 6 0	96 0 0	.....	.....	.....	.....	996 9 9
b Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d Sandalwood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	241 1 0	.....	.....	9 7 0	.....	.....	.....	.....	.....	.....	250 8 0
II. Timber and other produce removed from the forests by consumers or purchasers.	.....	1,710 13 0	.....	1,486 10 9	253 13 6	82 9 9	792 8 7	1,177 0 0	247 8 0	.....	.....	6,780 15 7
III. Confiscated, drift and waif wood	.....	.....	.....	3 14 0	14 0 0	23 8 0	.....	13 1 0	.....	.....	.....	54 7 0
IV. Revenue from forests not managed by Government—												
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V. Rent of leased forests, and payments to shareholders in forests managed by Government.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carried over	.....	2,648 2 6	.....	1,567 7 0	394 5 6	116 7 9	1,888 8 7	1,190 1 0	247 8 0	.....	.....	8,052 8 4

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—FINANCIAL RESULTS OF THE YEAR 1883-84.

Division.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction	...	...	18	12,096	13,450	18	25,546
Gáro Hills	820	938	15,660	7,431	12,332	16,480	21,001
Goálpára	66	...	34,802	10,693	18,851	34,868	29,544
Kámrúp	1,420	81	53,485	11,064	26,186	54,905	37,331
Darrang and Nowgong	1,080	140	32,743	6,155	14,848	33,823	21,143
Sibságar	82	34	8,163	5,480	11,769	8,245	17,283
Lakhimpur	...	96	15,618	6,653	14,602	15,618	21,351
Cachar	883	13	34,030	8,016	13,102	34,913	21,131
Sylhet	101	...	6,457	248	634	6,558	882
Khási and Jaintia Hills	...	...	5,204	795	3,555	5,204	4,350
Nága Hills	...	...	812	...	...	812	...
Total	4,452	1,302	2,06,992	68,931	1,29,329	2,11,444	1,99,562

FORM No. 58.

FOREST DEPARTMENT, ASSAM.—TREES FELLED BY GOVERNMENT AGENCY DURING THE YEAR 1883-84.

(*Selection fellings.*

Division.	Trees felled.	
	Descripton.	Number
Gáro Hills	Sâl	76
	Total	76
Kámrúp	Sâl	9
	Sam	2
	Dead Sâl posts	117
	Total	128
Darrang and Nowgong	Sâl	68
	Amari	1
	Makordhumia	1
	Gunserai	1
	Total	71
Lakhimpur	Nahor	26
	Total	26
	Grand Total	301
	Abstract of the Circle.	
	Sâl	153
	Dead Sâl posts	117
	Sam	2
	Amari	1
	Makordhumia	1
	Gunserai	1
	Nahor	26
	Total	301

FORM No. 59.

FOREST DEPARTMENT, ASSAM.—OUTTURN OF TIMBER AND OTHER PRODUCE CUT AND COLLECTED BY GOVERNMENT AGENCY DURING THE YEAR 1883-84.

Division.	Produce cut and collected.			
	How obtained.	Description.	Number or quantity.	Cubic feet.
Gáro Hills ...	Selection fellings ...	Sâl lo	76	.....
	By purchase ...	India- r ... Maunds	12 23 12	.....
	Drift	Sâl log	1	.....
		Sam log	7	.....
		Poma „	1	.....
		Jarul „	4	.....
		Karoi „	1	.....
		Miscellaneous log	16	.....
		Dug-outs	2	.....
		Total ...	108	.....
Kámrúp ...	Selection fellings ...	Sâl logs	14	.....
		Sam boats	2	.....
		Dead Sâl posts	117	.....
	Confiscation ...	Sâl pieces	10	.....
		„ (dead wood)	410	.....
		Sum logs	2	.....
		Jack „	1	.....
		Poma „	2	.....
		Uriam „	1	.....
		Bandorkanda	1	.....
		Dhuna boat	1	.....
		Khokan „	1	.....
		Bhalon „	1	.....
		Sappa „	3	.....
		Holloug „	2	.....
		Amari „	3	.....
		Khair posts	2	.....
		Amari „	4	.....
		Ahay „	1	.....
		Sarbai boat	2	.....
		Sâl „	34	.....
		„ logs	3	.....
		Sam „	3	.....
		Ajhar „	2	.....
		Makria „	2	.....
		„ boats	14	.....
		Sâl planks	75	.....
		Total ...	713	.....
Darrang and Nowgong.	By transfer ...	Sâl logs	120	.....
		„ (dead wood)	37	.....
	Selection fellings ...	Sâl logs	68	.....
		Amari „	1	.....
		Makardhumia logs	1	.....
		Gunserai „	1	.....
	Drift	Khokon „	20	.....
		Bola „	1	.....
		Poma „	2	.....
		Hullock „	2	.....
		Maipak „	1	.....
		Kadam „	1	.....
		Simul „	2	.....
	Confiscation ...	Sonaru post	61	.....
		Karai „	1	.....
		Ajhar posts	5	.....
		Bhalkala „	1	.....
		Amari boats	2	.....
		Bhomora „	1	.....
		Bhelu „	4	.....
		Ajhar „	3	.....

FORM No. 59.—(*Continued.*)

Division.	Produce cut and collected.				
	How obtained.	Description.		Number or quantity.	Cubic feet.
Darrang and Nowgong.—(*Concluded.*)	Confiscation.—(*Concluded.*)	Sam boat ...	...	1	.....
		Tita sappa boat ...	...	1	...
		Gomari „ ...	...	1	.....
		Poma pieces ...	...	1	.....
		Bhot „ ...	...	1	.....
		Sâl „ ...	...	10	.....
		Ahay „ ...	...	2	.....
		Gomari planks ...	...	40	.....
		Bola oars ...	...	7	.....
	Collection ...	Ahat pieces ...	...	3	.....
		Bamboos ...	...	100	.....
		India-Rubber ...	Mds.	0-5-11	.....
	Confiscation ...	Ditto ...	„	0-28-0	.....
		Charcoal ...	„	50-0-0	.....
		Total	...	502	.....
Sibságar ...	Drift	Bonsam logs ...	...	3	.....
		Uriam „ ...	...	1	.....
		Poma „ ...	...	1	.....
		Gunserai „ ...	...	1	.....
		Total	...	6	.....
Lakhimpur ...	Selection fellings ...	Nahor logs ...	...	26	.....
		Total	...	26	.....
Cachar ...	Drift	Miscellaneous logs ...	...	324	.....
	Confiscation ...	India-rubber ...	Mds.	3-10-8	.....
		Cane ...	Bndls.	21	.....
		Total	...	324	.....
		GRAND TOTAL	...	1,679	.....
		Abstract of the Circle.			
		Sâl logs ...	...	282	.....
		Sam „ ...	...	10	.....
		Poma „ ...	...	6	.....
		Ajhar or Jarul ...	..	6	.....
		Koroi logs ...	..	1	.....
		Sum „ ...	..	2	.....
		Jack „ ...	..	1	.....
		Uriam „ ...	..	2	.....
		Bandorkanda logs ...	..	1	.....
		Makria „ ...	...	2	.....
		Sâl logs (dead wood) ...	...	37	.....
		Amari logs ...	...	1	.....
		Makurdhumia logs ...	...	1	.....
		Gunserai „ ...	...	2	.....
		Khokon „ ...	...	20	.....
		Bola „ ..	...	1	.....
		Hullock „ ...	...	2	.....
		Maipak „ ...	...	1	.....
		Kadam „ ...	...	1	.....
		Bon Sam „ ...	...	3	.....
		Simul „ ...	...	2	.....
		Nahor „ ...	...	26	.....
		Miscellaneous „ ...	...	340	.....
		Sam boats ...	...	3	.....
		Amari „ ...	...	5	.....
		Bhomora „ ...	...	1	.....
		Bhelu „ ...	...	4	.....

FORM No. 59.—(*Concluded.*)

Division.	Produce cut and collected.			
	How obtained.	Description.	Number or quantity.	Cubic feet.
		Ajhar boats	3	.....
		Tita Sappa „	1	.....
		Gomari „	1	.....
		Sarbai „	2	.....
		Sâl „	34	.....
		Makria „	14	.....
		Dugouts	2	.....
		Dead Sâl posts	117	.....
		Sonaru „	61	.....
		Karai „	1	.....
		Ajhar „	5	.....
		Bhulkula „	1	.....
		Khair „	2	.....
		Amari „	4	.....
		Ahay „	1	.....
		Sâl pieces	20	.....
		„ (dead wood)... ...	410	.....
		Dhuna boats	1	.....
		Khokön „	1	.....
		Bhalon „	1	.....
		Sappa „	3	.....
		Hollong „	2	.....
		Poma pieces	1	.....
		Bhot „	1	.....
		Ahay „	2	.....
		Ahat „	3	.....
		Sâl planks	75	.....
		Gomari „	40	.....
		Bala oars	7	.....
		Bamboos	100	.....
		India-rubber ... Mds.	16-27-15	.....
		Cane ... Bndls.	21	.....
		Charcoal ... Mds.	50 0 0	.....
		Total ...	1,679	.....

FORM No. 60.

FOREST DEPARTMENT, ASSAM.—TIMBER AND OTHER PRODUCE RECEIVED FROM FORESTS IN SALE DEPÔTS DURING THE YEAR 1883-84.

Division.	Depôt.	Produce received.		
		Description.	Number or quantity.	Cubic feet.
Gáro Hills ...	Tura ...	Sâl logs	41	237
		„ scantlings	97	319
		„ planks	49	90
		Rubber ... ... Mds.	12 23 12	.....
		Total ...	187	646
Kámrúp ...	Kulsi ...	Sam boats	2	.....
	Fatasil (temporary)	Sâl logs...	5	100
		Total ...	7	100
Darrang and Nowgong.	Bhairabighát ...	Sâl logs	57	.....
		„ (dead wood)	49	.....
		Khokan logs	20	.....
		Bola log	1	.....
		Poma logs	2	.....
		Hullock logs	2	.....
		Maipak „	1	.....
		Kadam „	1	.....
		Ajhar „	8	.....
		Maipak beams	6	.....
		Sâl „	102	.....
		Khokan battens	238	.....
		„ planks	10	.....
		Bola „	5	.....
		Total ...	502	.....
Sibságar ...	Golághát ...	Nahor posts	2	.....
		Bonsam log (drift)	3	.....
		Uriam „ „	1	.....
		Poma „ „	1	.....
		Gunserai „ „	1	.....
		Total ...	8	.....
Lakhimpur ...	Dibrugarh ...	Nahor logs	26	598
		Total ...	26	598
Cachar ...	Silchar ...	Miscellaneous logs drift ...	130	4,439
		Canes ... ... Bndls.	21	.....
		Total ...	130	4,439
		Grand Total ...	860	5,783
		Abstract of the Circle.		
		Sâl logs...	103	337
		„ „ (dead wood) ...	49	.....
		„ scantlings	97	319
		„ planks	49	90
		„ beams	102	.....
		Sam boats	2	.....
		Khokan logs	20	.....
		„ battens	238	.....
		„ planks	10	.....
		Bola log	1	.....
		„ planks	5	.....

FORM No. 60.—(*Concluded.*)

Division.	Depôt.	Produce received.		
		Description.	Number or quantity.	Cubic feet.
		Poma logs	2	.....
		„ „ drift	1	.....
		Hullock logs	2	.....
		Maipak „	1	.....
		„ beams	6	.....
		Kadam logs	1	.....
		Ajhar „	8	.....
		Nahor „	26	598
		„ posts	2	.....
		Bonsam logs (drift)... ...	3	.....
		Uriam log „ ...	1	.....
		Gunserai logs „ ...	1	.....
		Miscellaneous logs (drift) ...	130	4,439
		Rubber ... ... Mds.	12 23 12	.....
		Canes ... ... Bndls.	21	.....
		Total ...	860	5,783

FROM No. 61.

FOREST DEPARTMENT, ASSAM.—SALES OF TIMBER AND OTHER PRODUCE CUT AND COLLECTED BY GOVERNMENT AGENCY DURING THE YEAR 1883 84.

Division.	Depôt or locality.	Produce sold.		
		Description.	Number or quantity.	Cubic feet.
		Sold locally.		
Gáro Hills ...	Bank of Ganol river.	Poma log (drift)	1	.....
		Sâl log	1	.....
		Jarul „	4	.....
		Sam „	7	.....
		Koroi „	1	.....
		Miscellaneous logs	16	.....
		Dugouts	2	.....
	Tura ...	Rubber ... ... Mds.	12 23 4.	.....
		Total ...	32	.....
		Sold from Depôts.		
Kámrúp ...	Gauhâti ...	Sâl boats	1	.....
	Kukurmara ...	Poma „	1	.....
		Sam „	2	.....
		Sâl logs	12	212
	Fatasil ..	Ditto	5	100
	Kulsi ...	Makria boat	1	.....
		Sam „	1	.....
		Total ...	23	312
		Sold locally.		
Ditto ...	Kukurmara ...	Sâl posts (dead)	29	.....
	Ramsha ...	Sâl piece	1	.....
	Barduár ...	Ditto	8	.....
		Sâl posts	176	.....
		„ logs	2	.....
		Makria boats	3	.....
		„ log	1	.....
		Sâl boats	3	.....
		Amari „	1	.....
	Dakhin Barkhetri.	Lac logs	2	.....
	Barpeta ...	Jack „	1	.....
	Panbari ...	Poma boats	2	.....
		Uriam „	1	.....
		Bandarkanda log	1	.....
		Khokan boat	1	.....
		Bholan „	1	.....
		Sappa „	1	.....
	Hajo ...	Sâl posts	8	.....
	Pantan ..	„ boats	7	.....
		Makria logs	3	.....
		Ajhar „	2	.....
		Sâl posts (dead)	31	.....
	Rani ...	Ditto „	161	.....
		Sâl boats	6	.....
		Tita Sappa log	1	.....
		Sâl planks	75	.....
	Myang ...	Sâl boat	1	.....
		Dhuna log	1	.....
		Makria boats	3	.....
		Sâl „	3	.....
		Serbai „	1	.....
		Sam „	3	.....
		Amari posts	4	.....

FORM No. 61.—(*Continued.*)

Division.	Depôt or locality.	Produce sold.		
		Description.	Number or quantity.	Cubic feet.
Kámrup.—(*Concld.*)	Gizang ...	Sâl boat	1	.....
	Luki District forest.	Makria boats	3	.....
		Sâl log	1	.....
		Hollong boats	2	.....
	Kawasing ...	Sâl „	3	.....
		Makria log	1	.....
	Jaipur ...	Sâl boats	2	.....
	Kulsi plantation.	Amari boat	1	.....
		Serboi „	1	.....
		Sâl pieces	2	.....
		Ahoy post	1	.....
	Kukurmara ...	Sâl post (dead)	1	.....
	Bangaon ...	Amari boat	1	.....
	Madartola ...	Khoir posts	2	.....
	Boko ...	Makria boat	1	.....
	Jarasal ...	Sâl „	4	.....
	Singra ...	Titasappa boat	1	.....
	Polasbari ...	Sâl posts	3	.....
	Bogai ...	„ boat	1	.....
	Mataikhar ...	„ Ditto	2	.....
		Total ...	578	.....
		Sold from depôt.		
Darrang and Nowgong.	Tezpur ...	Ajhar logs ...	35	367
	Bhanabighát .	Sâl „	12	153
		„ „ (dead wood)	21	27
		Poma „	4	79
		Ajhar „	3	56
		Total ...	75	682
		Sold locally.		
	Reserved forests.	Simul	2	.....
		Rubber ... ... Mds.	0 28 0	.....
		Sâl pieces	10	.....
		Ahay „	2	.....
	District forests.	Rubber ... ... Mds.	0 6 8	.....
		Gomari planks	40	.....
		Sonaru posts	61	.....
		Karoi „	1	.....
		Ajhar „	5	.....
		Bhalkala „	1	.....
		Amari boats	2	.....
		Bhomora „	1	.....
		Bhelu „	4	.....
		Ajhar „	3	.....
		Sam „	1	.....
		Tita Sappa „	1	.....
		Gomari „	1	.....
		Poma piece	1	.....
		Bhot „	1	.....
		Bola oars	7	.....
		Ahot pieces	3	.....
		Charcoal ... ... Mds.	50 0 0	.....
		Total ...	147	.....

FORM No. 61.—(*Continued.*)

Division.	Depôt or locality.	Produce sold.			
		Description.		Number or quantity.	Cubic feet.
		Sold from depôt.			
Sibságar ...	Golághát ...	Nahor posts		2	.....
		Bonsam logs (drift)		3	.....
		Uriam „ „		1	.....
		Poma „ „		1	.....
		Gunserai „ „		1	.....
			Total...	8	.....
Lakhimpur ...	Dibrugarh	Nahor logs		26	598
			Total...	26	598
		Sold from depôt.			
Cachar	Silchar ...	Miscellaneous logs (drift)		130	4,439
		Canes	Bndls.	21	.....
			Total...	130	4,439
		Sold locally.			
	Sonai ...	Miscellaneous logs (drift) ...		14	1,101
	Siyaltok ...	„ „ „		102	1,871
	Matijuri ...	„ „ „		73	2,222
	Baskandi ...	„ „ „		5	183
	Silchar ...	Rubber (confiscated) ...	Mds.	3 10 8	.....
			Total...	194	5,377
		Abstract of the Circle.			
		Sold from depôts.			
		Sâl logs		29	465
		„ „ (dead wood)		21	27
		„ boat		1	.....
		Ajhar logs		38	423
		Poma „		4	79
		„ „ (drift)		1	.....
		„ boat		1	.....
		Nahor posts		2	.....
		Sam boats		3	.....
		Bonsam log (drift)		3	.....
		Makria boat		1	.....
		Uriam log (drift)		1	.....
		Miscellaneous logs (drift)		130	1,439
		Gunserai „		1	.....
			Total...	236	5,433
		Canes	Bndls.	21	.....

FORM No. 61.—(*Concluded.*)

Division.	Depôt or locality.	Produce sold.		
		Description.	Number or quantity.	Cubic feet.
		Sold locally.		
		Sál logs	4	.....
		„ posts (dead)	222	.....
		„ pieces	21	.....
		„ posts	187	.....
		„ boats	33	.....
		„ planks	75	.....
		Poma log (drift)	1	.....
		„ boats	2	.....
		„ piece	1	.....
		Jarul logs	4	.....
		Sam „	7	.....
		„ boats	4	.....
		Karoi log	1	.....
		„ post	1	.....
		Miscellaneous logs	16	.....
		Miscellaneous logs (drift)	194	5,377
		Dugouts	2	.....
		Makria logs	5	.....
		„ boats	10	.....
		Amari boats	5	.....
		„ posts	4	.....
		Lac logs	2	.....
		Jack log	1	.....
		Uriam boat	1	.....
		Bandarkanda log	1	.....
		Khokan boat	1	.....
		Bholan „	1	.....
		Sappa „	1	.....
		Ajhar logs	2	.....
		„ posts	5	.....
		„ boats	3	.....
		Tita Sappa log	1	.....
		„ boats	2	.....
		Dhuna log	1	.....
		Serbai boats	2	.....
		Hollong boats	2	.....
		Ahay post	1	.....
		„ pieces	2	.....
		Khoir posts	2	.....
		Gomari planks...	40	.....
		„ boat	1	.....
		Sonaru posts	61	.....
		Bhalkala post	1	.....
		Bhomora boat	1	.....
		Bhelu boats	4	.....
		Bhot piece	1	.....
		Bola oars	7	.....
		Ahot pieces	3	.....
		Nahor logs	26	598
		Simul	2	.....
		Total timber	977	5,975
		Rubber ... ... Mds.	13 17 12	.....
		„ confiscated ... „	3 10 8	.....
		Charcoal ... ... „	50 0 0	.....

FORM No. 62.

FOREST DEPARTMENT, ASSAM.—ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS, OR SOLD LOCALLY DURING THE YEAR 1883-84.

Particulars.	Number or quantity.	Cubic feet.	Total of each head.	
			Number or quantity.	Cubic feet.
BALANCE AT COMMENCEMENT OF YEAR.				
KÁMRÚP DIVISION—				
Sâl logs	72	1,554		
„ „ (dead wood)	28	220		
Poma scantlings	8	3		
Sâl „	7	4		
Sam „	1	1		
Gunserai „	3	8		
Ahay „	12	6		
Boats	7	.....	138	1,796
DARRANG AND NOWGONG DIVISION—				
Sâl logs	12	153		
„ „ (dead wood)	20	27		
Poma logs	4	79		
Ajhar „	38	423		
Poma planks	1,003	132	1,077	814
SIBSÁGAR DIVISION—				
Sam boats	1	.....	.....	
Gunserai boats	2	.....	3	.....
Total balance	.....	.....	1,218	2,610
Received from the forests in depôts.				
Sâl logs	103	337		
„ „ (dead wood)	49	.....		
„ scantlings	97	319		
„ planks	49	90		
„ beams	102			
Sam boats	2			
Khokan logs	20			
„ battens	238			
„ planks	10			
Bola log	1			
„ planks	5			
Poma logs	2			
Hullock „	2			
Maipak „	1			
„ beams	6			
Kadam log	1			
Ajhar „	8			
Nahor logs	26	598		
„ posts	2			
Bonsam logs (drift)	3			
Uriam „ „	1			
Gunserai „ „	1			
Poma „ „	1			
Miscellaneous „	130	4,439		
Rubber ... Mds.	12 23 12			
Canes ... Bndls.	21	.....	860	5,783
Received from the forests and sold locally.				
Total timber (detailed in Form No. 61)	977	5,975		
Rubber ... Mds.	13 17 12			
„ (confiscated) ... „	3 10 8			
Charcoal ... „	50 0 0	.....	977	5,975
Received by transfer from sale depôts.				
Boats	2	.....	2	.....
Total	.....	.....	3,057	14,368

FORM No. 62.—(*Concluded.*)

Particulars.	Number or quantity.	Cubic feet.	Total of each head.	
			Number or quantity.	Cubic feet.
Removed by purchasers from depôts.				
Sâl logs	29	465		
„ „ (dead wood)	21	27		
„ boat	1			
Ajhar logs	38	423		
Poma „	4	79		
„ „ (drift)	1			
„ boat	1			
Nahor posts	2			
Sam boats	3			
Bonsam logs (drift)	3			
Makria boat	1			
Uriam log (drift)	1			
Miscellaneous „ „	130	4,439		
Gunserai „ „	1			
Canes ....Bndls.	21	.....	236	5,433
Sold locally.				
Total timber (detailed in Form No. 61)	977	5,975		
Rubber ....Mds.	13 17 12			
„ (confiscated) „	3 10 8			
Charcoal „	50 0 0	.....	977	5,975
Used by the Department.				
Sâl logs	117	1,342		
„ „ (dead wood)	76	220		
Nahor „	26	598		
Khokan „	20			
Poma „	2			
Hullock „	2			
Kadam „	1			
Ajhar „	8			
Bola „	1			
Maipak „	1			
Poma scattlings	8	3		
Sâl „	7	4		
Sam „	1	1		
Gunserai „	3	8		
Ahay „	12	6		
Maipak beams	6			
Sâl „	102			
Khokan battens	238			
„ planks	10			
Bola „	5			
Poma „	1,003	132		
Sam boat	1			
Gunserai boats	2	.....	1,652	2,314
Lost or written off as useless.				
India-rubber	chhataks.8	8 chhataks		
BALANCE AT CLOSE OF THE YEAR.				
GÁRO HILLS DIVISION—				
Sâl logs	41	237		
„ scantlings	97	319		
„ planks	49	90	187	646
KÁMRÚP DIVISION—				
Boats	5	.....	5	.....
Total	.....	.....	3,057	14,368

FORM No. 63.

FOREST DEPARTMENT, ASSAM.—TIMBER AND OTHER PRODUCE CUT, COLLECTED, AND REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS, INCLUDING PASTURES, DURING THE YEAR 1883-84.

Division.	Produce removed.		Amount of Revenue.	Amount actually realised during the year.
	Description.	Number or quantity.		
	District Forests.		Rs.	Rs.
Gáro Hills ...	Sâl-trees	391	3,910	2,200
	Reserved trees	404	2,810	1,622
	Unreserved trees	194	358	214
	Total	989	7,078	4,036
	Dead wood	2,852	3,091	3,091
	Mow posts	120	3	3
	Dugouts	1,375	436	436
	Foreign passes	2,210	4,420	4,420
	Gáro passes	2,300	1,175	1,175
	Grazing dues	.....	74	74
	Miscellaneous minor produce	.....	3	3
	Total Revenue during the year	.....	16,280	13,238
	Add—Revenue outstanding on account of previous years.	.....	.....	1,920
	Total revenue under II	.....	.....	15,158
	Reserved Forests.			
Goálpára	Sâl-trees	1,212	12,120	6,650
	Reserved trees	425	2,758	2,047
	Unreserved trees	32	64	52
	Total trees	1,669	14,942	8,749
	Poles or saplings	879	715	715
	Dead wood	1,054	640	640
	Boats or dugouts	128	1,018	1,018
	Charcoal ... Mds.	90	11	11
	Bamboos	6,544	131	131
	Canes	64,633	485	485
	Permit-fees	80	42	42
	Total under Reserved Forests	.....	17,984	11,791
	District Forests.			
	Sâl-trees	100	1,000	590
	Reserved trees	88	556	442
	Unreserved trees	6	12	9
	Total trees	194	1,568	1,041
	Lac	.....	8	8
	Fruits	.....	39	39
	Total revenue during the year	.....	19,599	12,879
	Add—Revenue outstanding on account of previous years.	.....	.....	21,205
	Total revenue under II	.....	.....	34,084

FORM No. 63.—(*Continued.*)

Division.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realised during the year.
	Reserved Forests.		Rs.	Rs.
Kámrúp ...	Sál-trees	2,769	27,650	19,089
	Reserved trees	332	1,986	1,560
	Unreserved trees	24	70	49
	Total trees.....	3,125	29,706	20,698
	Dead wood	9,800	5,197	5,197
	Fire-wood ..... (rafts)	61	30	30
	Charcoal ..... Mds.	20	3	3
	Bamboos	152	2	2
	Pass-fees	.....	1,100	1,100
	Miscellaneous minor produce	.....	133	133
	Total under Reserved Forests	.....	36,171	27,163
	District Forests.			
	Sál-trees	1,245	12,450	12,450
	Reserved trees	50	300	300
	Unreserved trees	29	71	71
	Total trees.....	1,324	12,821	12,821
	Dead wood	50	20	20
	Timber on land allotted for cultivation	.....	716	716
	Fire-wood licenses	.....	50	50
	Charcoal ..... Mds.	456	57	57
	Rubber-mahals	.....	905	905
	Lac-mahál	.....	9	9
	Bamboos	800	11	11
	Miscellaneous minor produce	.....	123	123
	Total revenue during the year.....	.....	50,883	41,875
	Add—Revenue outstanding on account of previous years.	.....	.....	11,170
	Total revenue under II.....	.....	.....	53,045
	Reserved Forests.			
Darrang and Nowgong	Sál-trees	42	420	420
	Reserved trees	38	228	228
	Unreserved trees	253	606	606
	Total trees.....	333	1,254	1,254
	Dead wood	40	70	70
	Pass-fees	78	39	39
	Fire-wood licenses (annual)	2	18	18
	Charcoal ..... Mds.	1,592	199	199
	Bamboos	550	6	6
	Sohuka ..... Bndls.	1	2	2
	Canes ..... "	1,990	14	14
	Total under Reserved Forests.....	.....	1,602	1,602

FORM No. 63.—(*Continued.*)

Division.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realised during the year.
	District Forests.		Rs.	Rs.
Darrang and Nowgong.—(*Concluded.*)	Sâl-trees	69	690	690
	Reserved trees	421	2,262	2,262
	Unreserved trees	625	1,269	1,269
	Total trees	1,115	4,221	4,221
	Dead wood	18	19	19
	Timber on land allotted for cultivation	.....	3,545	3,545
	Trade permits	30	15	15
	Firewood licenses (annual)	2	18	18
	" " (monthly)	11	11	11
	Charcoal Mds.	6,352	794	794
	Bamboos	933	13	13
	Canes	.....	4	4
	Rubber-mahâls	.....	22,395	22,395
	Lac-mahâl	.....	45	45
	Total revenue under II	.....	.....	32,682
	Reserved Forests.			
Sibságar ...	Reserved trees	65	390	390
	Unreserved trees	64	178	178
	Total trees	129	568	568
	Dead wood	1	12	12
	Firewood licenses (annual)	1	9	9
	" " (monthly)	4	4	4
	Bil grass	.....	179	179
	Canes Bndls.	1,900	14	14
	Permit-fees	19	10	10
	Total under Reserved Forests	.....	796	796
	District Forests.			
	Reserved trees	732	4,392	4,392
	Unreserved trees	300	721	721
	Total trees	1,032	5,113	5,113
	Boats or dugouts	114	340	340
	Timber on land allotted for cultivation	.....	627	627
	Dead wood	2	6	6
	Poles and saplings	173	11	11
	Firewood licenses (annual)	6	54	54
	" " (monthly)	202	202	202
	Charcoal Mds.	2,370	234	234
	Bamboos	575	15	15
	Canes Bndls.	8,065	61	61
	Permit-fees	311	157	157
	Total revenue during the year	.....	7,616	7,616
	Add—Revenue outstanding on account of previous years.	.....	.....	10
	Total revenue under II	.....	.....	7,626

FORM No. 63.—(*Continued.*)

Division.	Produce removed.		Amount of revenue.	Amount actually realised during the year.
	Description.	Number or quantity.		
	Protected and District Forests.		Rs.	Rs.
Lakhimpur ...	Reserved trees	536	3,052	3,052
	Unreserved trees	900	1,819	1,819
	Total trees	1,436	4,871	4,871
	Boats or dugouts	43	138	138
	Firewood licenses (annual)	44	396	396
	" " (monthly)	156	156	156
	Charcoal ... Mds.	1,031	130	130
	Bamboos	4,800	83	83
	Canes ... Budls.	18,100	36	36
	Rubber-mahál	.....	6,838	6,838
	Timber on land allotted for cultivation	.....	2,924	2,924
	Total revenue under II	.....	.....	15,572
	Reserved Forests.			
Cachar ...	First-class timber	192	1,817	1,817
	Second-class "	97	649	649
	Third-class "	4,496	10,120	10,120
	Total timber	4,785	12,586	12,586
	Fire-wood ... Mds.	2,751	86	86
	Bamboos	377,300	943	943
	Canes	10,365	648	648
	Rubber-mahále	.....	800	400
	Total under Reserved Forests	.....	15,063	14,663
	District Forests.			
	First-class timber	344	3,696	3,696
	Second-class "	67	441	441
	Third-class "	1,077	1,673	1,673
	Converted "	33	11	11
	Total timber	1,521	5,821	5,821
	Firewood ... Mds.	663	21	21
	Bamboos	150,300	376	376
	Canes ... Budls.	3,923	245	245
	Thatching-grass and reeds ... "	36,446	98	98
	Agor ... (baskets)	12	18	18
	Rubber-mahále	.....	1,200	600
	Sungrass-mahál	.....	224	224
	Timber on land allotted for cultivation	.....	4,732	4,732
	Fees for passes, permits, &c.	.....	2,649	2,649
	Total revenue under II	.....	.....	29,417
	Protected and District Forests.			
Sylhet	Reserved trees ... (rough)	3,552′	785	785
	" " ... (converted)	162′	44	44
	Unreserved trees ... "	1,107′	93	93
	" " ... (rough)	.....	392	392
	Total timber	.....	1,314	1,314

FORM No. 63.—(*Concluded.*)

Division.	Produce removed.		Amount of revenue.	Amount actually realised during the year.
	Description.	Number or quantity.		
			Rs.	Rs.
Sylhet.—(*Cncld.*)	Timber on land allotted for cultivation	....	4,688	2,757
	Bamboos	356,255	892	892
	Canes ..... Bndls.	2,913	183	183
	Leaves ..... (dals)	4,000	2	2
	Reeds ..... Bndls.	1,958	61	61
	Thatching-grass ..... "	50,150	125	125
	Trade permits	.....	254	254
	Home consumption permits	.....	628	628
	Elephant permits	.....	3	3
	Passes for forest produce	.....	223	223
	Total revenue under II.....	.....	.....	6,442
	District Forests.			
Khási and Jaintia Hills.	Sál-trees	64	640	640
	Unreserved trees	12	24	24
	Miscellaneous trees	25	12	12
	Total trees.....	101	676	976
	Dead wood ..... (pieces)	12,810	948	948
	Rubber-mahál	.....	600	600
	Cassia mahál	.....	75	75
	Grass ..... Bndls.	58	4	4
	Other minor produce	.....	105	105
	Total revenue under II.....	.....	.....	2,408
	District Forests.			
Nága Hills.....	Reserved trees	2	12	12
	Total trees.....	2	12	12
	Rubber-mahál	.....	800	800
	Total revenue under II.....	.....	.....	812
	Total revenue of the Circle under II.	.....	.....	1,97,276

FORM No. 64.

FOREST DEPARTMENT, ASSAM.—REVENUE DERIVED FROM, AND EXPENDITURE INCURRED ON, TIMBER AND OTHER PRODUCE SOLD TO PUBLIC DEPARTMENTS FROM DEPÔTS DURING THE YEAR 1883-84.

Name of department.	Particulars of supplies.	Amount supplied.	Rate.		Amount of Revenue.			Cost to Forest Department.			Comparison of Revenue and Expenditure.	
			At	Per	Due.	Received.	Outsanding.	Timber expenses under A. I.	Quota of all other expenditure chargeable against Timber, &c.	Total.	Surplus.	Deficit.
		Feet.	As.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Public Works Department	35 Ajhar logs ...	367	6	c. ft.	138	138	.....	92	23	115	23	.....
	Total				138	138	.....	92	23	115	23	.....
										Deduct Deficit	.....	.....
										Balance for the Department	23	.....

FORM No. 65.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1883-84.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
	Number.	C. feet.	Value.	Number.	C. feet.	Value.	In favour of the year.	Against the year.
			Rs.			Rs.	Rs.	Rs.
GÁRO HILLS DIVISION.								
Logs	.....	.....	.....	41	237	592	592	.....
Planks and scantlings.	.....	.....	.....	146	409	1,023	1,023	.....
Total.....	.....	.....	.....	187	646	1,615	1,615	.....
KÁMRÚP DIVISION.								
Logs	100	1,774	1,525	.....	.....	.....	.....	1,525
Sleepers and scantling	31	22	32	.....	.....	.....	.....	32
Boats.....	7	.....	140	5	.....	100	.....	40
Total.....	138	1,796	1,697	5	.....	100	.....	1,597
DARRANG AND NOWGONG DIVISION.								
Logs	74	682	100	.....	.....	.....	.....	100
Planks	1,003	132	20	.....	.....	.....	.....	20
Total.....	1,077	814	120	.....	.....	.....	.....	120
SIBSÁGAR DIVISION.								
Boats.....	3	.....	170	.....	.....	.....	.....	170
Total	3	.....	170	.....	.....	.....	.....	170
Grand Total.....	.....	.....	1,987	.....	.....	1,715	.....	272

FORM No. 65.—(*Continued.*)

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1883-84.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
		Rs.		Rs.	Rs.	Rs.
DIRECTION.						
Stores, Tools and Plant.						
Surveying and other instruments	11	277	23	333	56	.....
Tools	12	25	12	25	.....	.....
Office furniture	58	1,011	60	1,146	135	.....
Tent	1	185	1	185	.....	.....
Miscellaneous	.....	286	.....	357	71	.....
Buildings.						
Out houses	3	150	4	175	25	.....
Live-stock.						
Elephants	2	4,000	2	4,000	.....	.....
Total	.....	5,934	.....	6,221	287	.....
GÁRO HILLS DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	32	120	45	419	299	.....
Tools	76	125	81	129	4	.....
Office furniture	14	745	19	825	80	.....
Miscellaneous	.....	260	.....	394	134	.....
Live-stock.						
Elephant	1	1,800	1	1,800	.....	.....
Bullocks	.....	.....	2	125	125	.....
Total	.....	3,050	.....	3,692	642	.....
GOÁLPÁRA DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	138	584	104	492	.....	92
Tools	381	733	465	817	84	.....
Office furniture	53	1,014	55	1,025	11	.....
Tent	1	215	1	215	.....	.....
Miscellaneous	.....	1,058	.....	1,074	16	.....
Buildings.						
Dhubri bungalow and inspection-houses	5	8,450	3	8,200	.....	250
Other houses	24	735	16	590	.....	145
Carried over	.....	12,689	.....	12,413	111	487

FORM No. 65.—(*Continued*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
GOÁLPÁRA DIVISION.—(*Concluded.*)		Rs.		Rs.	Rs.	Rs.
Brought forward.....	.....	12,789	.....	12,413	111	487
Live-stock.						
Elephants	2	3,800	2	3,800	.....	.....
Bullocks	2	100	2	100	.....	.....
Total.....	.....	16,689	.....	16,313	111	487
KÁMRÚP DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	47	265	48	236	.....	29
Tools	407	704	347	697	.....	7
Office furniture	39	613	44	778	165	.....
Tent	1	50	1	45	.....	5
Miscellaneous.....	.....	1,686	.....	1,524	.....	162
Buildings.						
Kulsi plantation bungalow	1	3,325	1	3,325	.....	.....
Gauhátí bungalow.....	.....	.....	1	5,658	5,658	.....
Other houses	56	914	61	908	.....	6
Live-stock.						
Elephants	2	3,500	6	8,600	5,100	.....
Bullocks	4	310	4	310	.....	.....
Total.....	.....	11,367	.....	22,081	10,923	209
DARRANG AND NOWGONG DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments.....	28	275	31	255	.....	20
Tools	598	700	469	500	.....	200
Office furniture	101	700	90	700	.....	.....
Tent	1	20	1	10	.....	10
Miscellaneous.....	.....	700	.....	500	.....	200
Buildings.						
Bhairabighát bungalow and inspection-houses.....	3	3,800	3	3,800	.....	.....
Other houses	40	900	40	600	.....	300
Live-stock.						
Elephants	2	1,600	2	1,700	100	.....
Total.....	.....	8,695	.....	8,065	100	730

FORM No. 65.—(*Continued.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
Sibságar Division.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments	31	124	28	90	.....	34
Tools	465	732	462	687	.....	45
Office furniture	44	539	51	600	61	.....
Tents	2	65	2	65	.....	.....
Miscellaneous	.....	247	.....	250	3	.....
Buildings.						
Sibságar bungalow	1	5,000	1	5,000	.....	.....
Golághát bungalow and inspection-houses	5	4,800	5	4,800	.....	.....
Other houses	11	300	15	400	100	.....
Live-stock.						
Elephants	2	2,300	3	4,300	2,000	.....
Bullocks	2	80	2	30	.....	50
Total	.....	14,187	.....	16,222	2,164	129
Lakhimpur Division.						
Stores, Tools and Plant.						
Surveying and other instruments	48	578	48	578	.....	.....
Tools	183	352	198	408	56	.....
Office furniture	30	455	35	484	29	.....
Tents	6	721	5	626	.....	95
Miscellaneous	.....	446	.....	694	248	.....
Buildings.						
Lakhimpur bungalow	1	4,000	1	4,378	378	.....
Other houses	.....	.....	13	1,102	1,102	.....
Live-stock.						
Elephants	4	6,900	2	3,000	.....	3,900
Total	.....	13,452	.....	11,270	1,813	3,995
Cachar Division.						
Stores, Tools and Plant.						
Surveying and other instruments	25	379	30	642	263	.....
Tools	175	369	273	660	291	.....
Office furniture	106	1,091	103	1,065	.....	26
Tent	1	140	1	70	.....	70
Miscellaneous	.....	661	.....	678	17	.....
Carried over	.....	2,640	.....	3,115	571	96

FORM No. 65.—(*Concluded.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
CACHAR DIVISION.—(*Concluded.*)						
Brought forward.....	.....	2,640	.....	3,115	571	96
Buildings.						
Divisional and office bungalows, revenue stations, and inspection-houses	5	7,775	7	8,975	1,200	.....
Other houses	45	1,454	76	1,636	182	.....
Live-stock.						
Elephant	1	800	1	600	.....	200
Total	.....	12,669	.....	14,326	1,953	296
SYLHET DIVISION.						
Stores, Tools and Plant.						
Survey and other instruments	1	5	1	5	.....	.....
Tools	8	40	8	40	.....	.....
Miscellaneous.....	.....	20	.....	20	.....	.....
Total	.....	65	.....	65	.....	.....
KHÁSI AND JAINTIA HILLS DIVISION.						
Stores, Tools and Plant.						
Tools	34	58	54	101	43	.....
Miscellaneous.....	.....	16	.....	16	.....	.....
Buildings.						
Small houses	3	200	3	200	.....	.....
Total	.....	274	.....	317	43	.....
TOTAL FOR THE CIRCLE	.....	86,382	.....	98,572	18,036	5,846†

† Net difference in favor of the year Rs. 12,190.

* The difference of Rs. 1,933 between the closing balance of 1881 82 and opening balance of 1882 83, as noticed in the Appendix to the Resolution of the Government of India on the Administration Report for 1882 83, is accounted for by the omission of the civil officer's division from this statement in 1882-83 The articles to the value of Rs 1,933 were distributed to the several divisions, and entered in the divisional returns as received during the year, instead of altering the opening balance. Hence the discrepancy.

SHILLONG :
The 24th June 1884.

GUSTAV MANN,
Conservator of Forests, Assam.

Appendix I.

Register of Reserved Forests in the Province of Assam added during 1883-84.

GÁRO HILLS FOREST DIVISION.

GÁRO HILLS DISTRICT.

I.—The Dibru Hill Forest Reserve.—Notified in the *Assam Gazette* of the 23rd June 1883, page 288, situated in mauza No. 7.

(*1*) *Area.*—Nine square miles, or 6,080 acres.

(*2*) *Boundaries*—

West.—A survey line running from boundary-mound No. 1, near the old Bamondanga village on the right bank of the Nitai river, in a northerly direction to boundary-mound No. 2; thence across a *bil* in a north-easterly direction to boundary-mound No. 3, and from this to boundary-mound No. 4, on the left bank on the Sathbhanga river; then along the right bank of this river from a point opposite boundary-mound No. 4 to boundary-mound No. 5, and a survey line running from the latter in a northerly direction to boundary-mound No. 6, on the left bank of the Gogua river.

North.—The left bank of the Gogua river from boundary-mound No. 6 to the junction of this river with the Zabrang stream, which is the western boundary of the B mahál of Mechpára.

East.—The Zabrang stream from its junction with the Gogua river up to boundary-pillar No. 7, near its source on the top of the Dibru Hill, thence a survey line running from boundary-pillar No. 7 in a south-westerly direction to boundary-mound No. 8, on the Nitai river.

South.—The left bank of the Nitai river from boundary-mound No. 8 to boundary-mound No. 1.

(*3*) *Soil.*—For the most part hilly and sometimes undulating ground, the former consists of soft, white, clayey sandstone accompanied with quartzite pebbles, also outcrops of gneiss and quartzite. The undulating ground consists, sometimes, of stiff, red, clay and sometimes of sandy shingly loam.

(*4*) *Description of forest.*—North of the Sathbhanga stream, nearly all Sâl with a few scattered deciduous trees, such as Gugra, Akshi, Kumbi, and Bowra. The remainder of the tract consists of lower hill forest with Ajhar along the banks of the streams. The forest growth is young, vigorous, and the area fairly stocked, but has suffered much from fires.

(*5*) *Timber depôt.*—None at present.

(*6*) *Timber markets.*—Lower Bengal and Mymensingh.

(*7*) *Lines of export.*—The Nitai, Gogua, Jingeram, and Brahmaputra rivers.

(*8*) *List of villages or private lands remaining within the forest boundaries.*—None.

(*9*) *Rights of surrounding population.*—None.

(*10*) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division, and that of the Conservator.

(*11*) *Working plan.*—The detail examination of the forest will be carried out after the remaining tracts, proposed to be reserved in the Gáro Hills district, have been surveyed and demarcated.

II.—The Jinari Forest Reserve.—Notified in the *Assam Gazette* of the 23rd June 1883, page 288, situated in mauza No. 3.

(*1*) *Area.*—Ten square miles, or 6,640 acres.

(*2*) *Boundaries*—

North.—The Modhujhora from its junction with the Chikorsaikh stream to boundary-mound No. 3, thence a survey-line running in a north-easterly direction to boundary-mound No. 2, on Raksom Hill, thence a survey line running in a south-easterly direction to boundary-mound No. 1, on the top of Bilong Hill.

East.—A survey line running from boundary-mound No. 1 in a south-westerly direction to boundary-mound No. 5, on the left bank of the Dingok stream, and thence to boundary-mound No. 4, near the source of the Rongjein stream.

South.—The Rongjein stream from boundary-mound No. 4 to its junction with the Rajen stream, thence along the latter to its junction with the Chikorsaikh stream.

West.—The Chikorsaikh stream from its junction with the Rajen stream to its junction with the Modhujhora.

(*3*) *Soil.*—There are two ranges of hills with the valley of the Jinari between them; they consist of gneiss and quartzite rocks, and sometimes sandstone and indurated red clay with grains of quartz; the valley is sandy loam, rich with decayed vegetable matter.

(*4*) *Description of forest.*—Sâl and lower hill forest, the former being young and vigorous, with no mature trees fit for felling; the latter dense, containing fine trees of Ajhar and Sam along the banks of the river.

(5) *Timber depôts.*—There are none at present.
(6) *Timber markets.*—Goálpára, Dhubri, Lower Bengal, and Mymensingh.
(7) *Lines of export.*—The Jinari and Brahmaputra rivers.
(8) *List of villages or private lands remaining within the forest boundaries.*—None.
(9) *Rights of surrounding population.*—None.
(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.
(11) *Working plan.*—The detail examination of the forest is to be made when the survey and demarcation of the remaining areas, proposed to be reserved in the Gáro Hills, have been finished.

III.—The Chima and Bangshi Forest Reserve.—Notified in the *Assam Gazette* of the 23rd June 1883, page 288, situated in mauza No. 4.

(1) *Area.*—Fourteen square miles, or 8,680 acres.
(2) *Boundaries*—

North.—The right bank of the Dadramjhora from boundary-mound No. 12 along the foot of the hills to boundary-mound No. 11; thence a survey line running in a south-easterly direction to boundary-mound No. 10; thence along a small stream at the foot of high land to boundary-mound No. 9; thence a survey line running in a north-westerly direction to boundary-mound No. 8, on the right bank of the Dadramjhora, and along the latter to boundary-mound No. 7; thence a survey line running in an easterly direction to boundary-mounds Nos. 6 and 5, and prism No. 4; thence along the Bangshi bridle-path in a southerly direction to boundary-mound No. 3; thence a survey line running in a south-easterly direction to boundary-mound No. 2, and in an easterly direction to No. 1.

East.—The Dudnai river from boundary-mound No. 1 to its junction with the Bangshi stream, and along the left bank of the latter to boundary-mound No. 30; thence a survey line running in a southerly direction to boundary-mounds Nos. 29, 28, and 27, and then in an easterly direction to No. 26 on the left bank of the Dudnai river, and along the latter to boundary-mound No. 25; thence short survey lines to boundary-mounds Nos. 24, 23, and 22; and again along the left bank of the Dudnai river to its junction with the Chil Nadi, and along the left bank of the latter to boundary-mound No 21; thence a survey line running in a southerly direction to boundary-mounds Nos. 20, 19, and 18.

South.—A survey line running from boundary-mound No. 18 in a westerly direction to boundary-mound No. 17, on the right bank of the Dudnai river, and along the latter to its junction with the Saramsa stream, and along the left bank of the latter to boundary-mound No. 16.

West.—A survey line running from boundary-mound No. 16, in a north-westerly direction to boundary-mounds Nos. 15, 14, 13, and then in a north-easterly direction to boundary-mound No. 12, on the right bank of the Dadramjhora.

(3) *Soil.*—The reserve comprises the first range of hills and level portion of the valley on the west bank of the Dudnai river, also the hills between the Chichura river where it joins the Manda and Chil rivers, the rock is composed of gneiss and mica schists and quartzite rock with dykes of trap. The level land in the valley consists of the wash from the adjoining hills covered in places with rich humus.
(4) *Description of forest.*—The Chima portion consists of lower hill forest, with a few scattered Sál-trees. The remainder contains some very fine young and vigorous patches of Sál, with patches of bamboo or lower hill forest between.
(5) *Timber depôts.*—There are none at present.
(6) *Timber markets.*—Mornoi, Goálpára, Dhubri, Lower Bengal, and Mymensingh.
(7) *Lines of export.*—The Dudnai and Brahmaputra rivers.
(8) *List of villages or private lands remaining within the forest boundaries.*—None.
(9) *Rights of surrounding population.*—None.
(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.
(11) *Working plan.*—A detail examination of the forest will be made after the demarcation of all reserves has been completed.

IV.—The Dhima Forest Reserve.—Notified in the *Assam Gazette* of the 23rd June 1883, page 288, situated in mauza No. 4:—

(1) *Area.*—Nine square miles, or 5,760 acres.
(2) *Boundaries*—

North.—The district boundary running from prism No. 7 on the right bank of the Dudnai river in a north-easterly direction to prisms Nos. 8 and 9; thence short survey lines running in a south-easterly direction to boundary-mound No. 10, in an easterly direction to boundary-mound No. 11, and then in a north-easterly direction to boundary-mounds Nos. 12, 13, 14, and 15; thence the district boundary to the prism at Sonibar hát.

East.—The pathway leading from Sonibar hát to boundary-mound No. 16, near Garopara; thence two short survey lines to boundary-mounds Nos. 17, and 18; thence along the left bank of the Rongbujhora to boundary-mound No. 19; then short survey lines to mounds Nos. 20, 21, and 22, and thence again along the left bank of Rongbujhora to boundary-mound No. 1; thence a survey line running in a south-westerly direction to boundary-mound No. 2, and in a southerly direction to boundary-mound No. 3.

South.—A survey line running from boundary-mound No. 3 in a westerly direction to boundary-mound No. 4.

West.—A survey line running from boundary-mound No. 4, in a north-westerly direction to boundary-mounds Nos. 5 and 6, the latter on the right bank of the Dudnai river; thence along this bank of the river to prism No. 7, on the district boundary.

(3) *Soil.*—Partly hilly and partly gentle, undulating ground, with stiff red clay, and sometimes sandstone and gneiss with quartzite pebbles.

(4) *Description of forest.*—Sâl, with a few scattered deciduous trees, such as Gugera, Akshi, Bowra, Amlaki, &c., some of the hilly portion, which has been jhúmed over, is covered with bamboos. The forest growth is young, vigorous, and the area fairly stocked, but has suffered much from fires.

(5) *Timber depôts.*—There are none at present.

(6) *Timber markets.*—Mornoi, Goálpára, Dhubri, Lower Bengal, and Mymensingh.

(7) *Lines of export.*—The Dudnai and Brahmaputra rivers.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—A detailed examination of the forest will be made after the demarcation work of all the reserves has been completed.

V.—*The Dilma Forest Reserve.*—Notified in the *Assam Gazette* of the 23rd June 1883, page 288, situated in mauza No. 4:—

(1) *Area.*—Two square miles, or 1,120 acres.

(2) *Boundaries*—

North.—The district boundary from boundary-mound No. 1, near the village of Kharkhuta, to prisms Nos. 19 and 18.

East.—A survey line from prism No. 18, on the district boundary, running in a southerly direction to boundary-mounds Nos. 10, 9, 8, and 7.

South.—A small stream running north of the village of Konchikhal from boundary mound No. 7 to boundary-mound No. 6, on the top of the hill near the source of this stream; thence a survey line running in a westerly direction to boundary-mound No. 5.

West.—A survey line running from boundary-mound No. 5 in a northerly direction to boundary-mounds Nos. 4, 3, 2, and 1, the latter on the district boundary, near the village of Kharkhuta.

(3) *Soil.*—This reserve comprises a range of hills running in a north-easterly direction between the villages of Rajasimla and Kharkhuta, with small areas of the adjoining plains land east and west. The soil is for the most part a stiff red clay with accumulations of humus, and here and there outcrops of gneiss and quartzite rocks.

(4) *Description of forest.*—The plains land on the west contains a good area of healthy young Sâl poles, the remainder of the reserve contains Sâl with scattered Koroi, Poma, Gomari, and Akshi.

(5) *Timber depôts.*—There are none at present.

(6) *Timber markets.*—Nagorbera, Mornai, and Goálpára.

(7) *Lines of export.*—The Kornoi stream joins the Deosali river, and the latter enters the Brahmaputra near Nagarbera.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—The detailed examination of the forest will be made after the proposed reserves in the Gáro Hills have all been surveyed and demarcated.

VI.—*The Rajasimla Forest Reserve.*—Notified in the *Assam Gazette* of the 23rd June 1883, page 288, situated in mauza No. 4:—

(1) *Area.*—Seven square miles, or 4,800 acres.

(2) *Boundaries*—

North.—The district boundary from prism No. 15 to prism No. 14; thence a survey-line running in a south-easterly direction to boundary-mound No. 2; thence in a north-westerly direction to boundary-mound No. 1; thence in a north-easterly direction to prism No. 12 on the district boundary, and along the latter to Trigonometrical Survey mound at junction of lands of Atiabari and Madang.

East.—From Trigonometrical Survey mound at junction of lands of Atiabari and Madang along the district boundary to boundary-mound No. 5, on the north side of the Rajasimla and Atiabari pathway.

South.—The Rajasimla and Atiabari pathway from boundary-mound No. 5 to boundary-mound No. 4.

West.—A survey line running from boundary-mound No. 4, on the Rajasimla and Atiabari pathway in a north-westerly direction to boundary-mound No. 3, thence to prism No. 16 on the district boundary, and along the latter from prism No. 16 to prism No. 15, excluding the low land near the village of Rohmari.

(3) *Soil.*—This reserve comprises a spur projecting in a northerly direction from the rest of the Gáro Hills, and its steep faces are composed entirely of masses of gneiss and quartzite rocks covered with little clay, the gentle slopes and also the foot of the hills, especially towards the east, is red clay with good accumulations of decayed vegetable matter.

(4) *Description of forest.*—The whole area of this reserve has Sâl scattered over it, accompanied with Koroi, Gomari, Kumbi, Poma, and Akshi, but on the east side, along the foot of the hills, there are some fine patches of Sâl-poles, young and vigorous. The forest has much suffered from fires.

(5) *Timber depôts.*—There are no timber depôts at present.

(6) *Timber markets.*—Nagorbera, Mornoi, and Goálpára.

(7) *Lines of export.*—On the east side, the Deosali river, which enters the Brahmaputra near Nagarbera. On the west, the Kornoi, a small stream which enters the Deosali river north of the Assam Trunk Road.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—A detailed examination of the forest will be made after the survey and demarcation of all the reserves in the Gáro Hills have been completed.

VII.—The Ildek Forest Reserve.—Notified in the *Assam Gazette* of the 23rd June 1883, page 288, situated in manza No. 4 :—

(1) *Area.*—Two square miles, or 1,280 acres.

(2) *Boundaries*—

North.—A survey line running from boundary-mound No. 10, on the right bank of the Ildek river, to boundary-mounds Nos. 9 and 8, the latter on the district boundary east of prism No. 8, thence along this boundary in an easterly direction to prism No. 7.

East.—From prism No. 7 along the district boundary to prism No. 6, thence a survey line running in a southerly direction to boundary-mound No. 5.

South.—From boundary-mound No. 5, in a westerly direction, along a pathway to boundary-mound No. 4 ; thence a survey line running in a north-westerly direction to boundary-mound No. 3, and in a westerly direction to boundary-mounds No. 2 and No. 1, the latter on the right bank of the Ildek river.

West.—The right bank of the Ildek river from boundary-mound No. 1 to boundary-mound No. 10.

(3) *Soil.*—The land in this reserve, consisting of low hills and undulating ground, is composed of stiff red clay, with grains of quartz covered more or less with humus.

(4) *Description of forest.*—Sâl with deciduous trees scattered amongst it, such as Gugêra, Akshi, Kumbi, Bowra, and Amluki. The forest growth is young, vigorous, and the area fairly stocked, but has suffered much from fires. Along the banks of streams there is lower hill forest, with Sam and Ajhar.

(5) *Timber depôts.*—Nagorbera on the Brahmaputra.

(6) *Timber markets.*—Dhubri, Nagarbera, and Lower Bengal.

(7) *Lines of export.*—The Deosali river to Nagarbera, thence the Brahmaputra.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—The detail examination of the forest will be carried out after all the reserves have been surveyed and demarcated.

VIII.—The Darugiri Forest Reserve.—Notified in the *Assam Gazette* of the 23rd June 1883, page 288, situated in manza No. 4 :—

(1) *Area.*—Four square miles, or 2,285 acres.

(2) *Boundaries*—

North.—A survey line running from boundary-mound No. 1, on the left bank of the Rankhu river, in an easterly direction to boundary-mounds Nos. 2, 3, and 4, the latter on the right bank of the Rongit river.

East.—The right bank of the Rongit river from boundary-mound No. 4 to its junction with the Rankhu river, and along the latter up to its junction with the Nangchauramjhora.

South.—The Nangchauramjhora from its junction with the Rankhu river to boundary-mound No. 5, thence a survey line running in a westerly direction to boundary-mound No. 6, then in a southerly direction to boundary-mound No. 7, and thence in a north-westerly direction to boundary-mound No. 8.

West.—A survey line running from boundary-mound No. 8 in a north-easterly direction to boundary-mounds Nos. 9 and 10, the latter on the right bank of the Rankhu river, thence up this river to boundary-mound No. 1.

(3) *Soil.*—The land on this reserve, consisting of low hills and undulating ground, is composed of stiff red clay with grains of quartz, covered more or less with humus.

(4) *Description of forest.*—Sâl with deciduous trees scattered amongst it, such as Gugera, Akshi, Kumbi, Bowra, and Amluki. The forest growth is young, vigorous, and the area fairly stocked, but has suffered much from fires. Along the banks of streams, there is lower hill forest with Sam and Ajhar.

(5) *Timber depôts.*—Nagarbera, on the Brahmaputra.

(6) *Timber markets.*—Mornoi, Dhubri, Nagarbera, and Lower Bengal.

(7) *Lines of export.*—The Deosali river to Nagarbera, thence the Brahmaputra.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—The detailed examination of the forest will be carried out after all the reserves have been surveyed and demarcated.

IX.—*The Rangrengiri Forest Reserve.*—Notified in the *Assam Gazette* of the 23rd June 1883, page 288, situated in mauza No. 5 :—

(1) *Area.*—Thirteen square miles, or 8,480 acres.

(2) *Boundaries*—

North.—A survey line running from boundary-mound No. 5, on the left bank of the Rongren river, in a south-easterly direction, to boundary-mounds Nos. 6, 7, and 8, the latter on the right bank of the Rangapjhora; thence across that jhora and along its left bank to boundary-mound No. 9; thence a survey line running in a south-easterly direction to boundary-mound No. 10; thence along a pathway leading from Rongrengiri to Samgongiri, to boundary-mound No. 11, on the right bank of the Samgong river.

East.—Down the Samgong river from boundary-mound No. 11 to boundary-mound No. 12.

South.—A survey line running from boundary-mound No. 12, on the Samgong river, in a westerly direction to boundary-mound No. 13, on the left bank of the Semsang river, and across this river and up the Memojhora to boundary-mound No. 14; thence a survey line running in a north-westerly direction to boundary-mound No. 15, in a north-easterly direction to boundary-mound No. 16, and up the Semsang river to Rangrengiri police-station; thence around the land of this station, by a survey line to boundary-mounds Nos. 17, 18, 19, and 20, the latter on the left bank of the Semsang river, and along this river to its junction with the Rangri river, and up the latter to its junction with the Dirchingjhora, up this stream to boundary-mound No. 1; thence a survey line running in a north-westerly direction to boundary-mound No. 2, on the right bank of the Semsang river.

West.—From boundary-mound No. 2 down the Semsang river to boundary-mound No. 3, at its junction with the Khakhrijhora, up the latter stream to boundary-mound No. 4; thence a survey line running in a north-westerly direction to boundary-mound No. 5 on the left bank of the Rongreng river. A plot of land in the middle of the reserve and with the following boundaries, is excluded from the reserve for the site and cultivation of the Rangrengiri village :—

North.—High land and Nakhatok Chakuya stream.
South.—Semsang river.
East.—Rangup stream.
West.—Warim stream.

(3) *Soil.*—In this forest area there is almost every variety of soil. There is gneiss and mica schists and quartzite rocks and dykes of trap, also sandstone strata, and several outcrops of lime and coal. The surface soil is everywhere more or less enriched with humus.

(4) *Description of forest.*—The most of this area consists of level or undulating land, covered chiefly with fine Sâl-trees and poles. It also consists of evergreen forest and bamboos.

(5) *Timber depôts.*—Brahmaputra below Rewak on the Someswari river.

(6) *Timber markets.*—Durgapur, Mymensingh, and Lower Bengal.

(7) *Lines of export.*—Down the Someswari river.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—The detail examination of the forest will be made after the demarcation and survey of all the reserves have been completed.

X.—The Emangiri Forest Reserve.—Notified in the *Assam Gazette* of the 10th November 1883, page 608, situated in mauza No. 1.

(1) *Area.*—Three square miles, or 2,080 acres.

(2) *Boundaries*—

East.—Down the Rongdik river from its junction with Dadojhora to mound No. 1 on its west bank. Then a straight line from mound No. 1 to mound No. 2, on Okramjhora, and from mound No. 2 to mound No. 3.

South.—A straight line from mound No, 3 to mound No. 4, from mound No. 4 to mound 5, on east bank of Kampangjhora.

West.—Up the Kampangjhora from mound No. 5 to mound No. 6; then a straight line from mound No. 6, on Kampangjhora, to mound No. 7, on Dadojhora.

North.—Down the Dadojhora from mound No. 7 to its junction with the Rongdik river.

(3) *Soil.*—This reserve consists mostly of gentle undulating land partly hilly; its soil, where occupied by Sâl, is poor, and it is only on this account probably that it has escaped jhúming. The outcrops are trap and sometimes sandstone and white clayey sandstone with a surface soil of vegetable matter.

(4) *Description of forest.*—The level and gently undulating portion is occupied by very promising young Sâl, all mature trees having been worked out by the Meches. The hilly portion contains chiefly bamboos in lower hill forest.

(5) *Timber depôt.*—Bagmara on the Someswari river.

(6) *Timber markets.*—Durgapur, Mymensingh, and Bengal.

(7) *Lines of export.*—Down the Rongdik and the Gara or Rompha rivers into which the Ramphang jhora falls, also the Somesvari river.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—The detail examination of the forest will be made after all the remaining tracts proposed as reserves in this district have been demarcated and surveyed.

XI.—The Rewak Forest Reserve.—Notified in the *Assam Gazette* of the 10th November 1883, page 608, situated in mauza No. 1:—

(1) *Area.*—Two square miles, or 1,280 acres.

(2) *Boundaries*—

East.—The Someseri river from where the Dadrajhora joins it down to mound No. 1, on its west bank, just above the present police-station.

South.—A straight line from mound No. 1 on west bank of Somesvari river to mound No. 2, and from mound No. 2 to mound No. 3.

West.—A straight line from mound No. 3 to mound No. 4, and from mound No. 4 to mound No 5.

North.—A straight line from mound No. 5 to mound No. 6, on west bank of Dadrajhora, where the Rongrengiri path crosses it: then down the Dadrachering or jhora to its junction with the Someseri river.

(3) *Soil.*—This reserve takes up a range of small hills with a continuous ridge running north—south. The soil is for the most part poor, generally a very shallow surface soil of vegetable matter over a substrata of soft white stone (probably clay and sandstone) with frequent outcrops of gneiss and trap. To the north-east and east, however, the substrata and outcrops are limestone.

(4) *Description of forest.*—Very promising young Sâl-poles, the mature trees having all been worked out on account of the favourable situation of this forest on the Somesvari river, which is fit for boat traffic even for four miles above Rewak at all times of the year.

(5) *Timber Depôt.*—Bagmara, on the Somesvari river.

(6) *Timber markets.*—Mymensingh and Dacca.

(7) *Lines of export.*—The Somesvari river

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—The detailed examination of the forest will be made after the remaining tracts proposed as reserves in this district have all been demarcated and surveyed.

XII. The Sipu Forest Reserve.—Notified in the *Assam Gazette* of the 10th November 1883, page 608, situated in mauza No. 1:—

(1) *Area.*—Two square miles, or 1,280 acres.

(2) *Boundaries*—

North.—The Dabatjhora, from its junction with the Somesvari river, to mound No. 1 on its south bank.

East.—A straight line from mound No. 1 on Dabatjhora to mound No. 2.

South.—A straight line from mound No. 2 to mound No. 3, from mound No. 3 to mound No. 4, from mound No. 4 to mound No. 5, and from mound No. 5 to mound No. 6 on east bank of Somesvari river.

West.—Up the Somesvari river from mound No. 6 on its east bank to mouth of Dabatjhora.

(3) *Soil.*—This forest takes up a table-land on the east bank of the Somesvari river. The soil is for the most part a thin layer of vegetable matter clay on limestone rock. There are also a few outcrops of gneiss and trap here and there.

(4) *Description of forest.*—Sâl with a few ever green trees along the banks of the rivers and streams. The mature trees have all been worked out by the Meches and Gáros, the forest being very conveniently situated for timber works at all times of the year.

(5) *Timber depôt.*—Bagmara on the Somesvari river.

(6) *Timber markets.*—Durgapur, Mymensingh, and Dacca.

(7) *Lines of export.*—Down the Somesvari river, which is fit for boats and timber traffic for about a mile above this reserve the whole year round.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—The detailed examination of this forest will be made after the remaining tracts proposed as reserves in this district have all been demarcated.

XIII. *The Bolsalgiri Forest Reserve.*—Notified in the *Assam Gazette* of the 10th November 1883, page 608, situated in mauza No. 3 :—

(1) *Area.*—One square mile, or 640 acres.

(2) *Boundaries*—

North.—A straight line from mound No. 1 on Grimjhora to mound No. 2, south of the Upper Bolasalgiri reserve ; from mound No. 2 to mound No. 3, on west bank of Asimjhora.

East.—Down the Asimjhora from mound No. 3 to its junction with the Dakjhora then down the Dakjhora to its junction with the Ganol or Kalu river.

South.—Down the Ganol or Kalu river from the point where the Dakjhora joins it to mound No. 4 on its north bank.

West.—A straight line from mound No. 4 on north bank of Ganol river to mound No. 5, from mound No. 5 to mound No. 6, from mound No. 6 to mound No. 7, from mound No. 7 to mound No. 8, and from mound No. 8 to mound No. 9, on Grimjhora. Then up the Grimjhora from mound No. 9 to mound No. 1.

(3) *Soil.*—This reserve is a spur jutting out south from the Chota Tura range, containing very poor soil, hence probably its escape from jhuming. The outcrops are gneiss trap and white clayey sandstone, with a very light covering of vegetable matter.

(4) *Description of forest.*—Chiefly Sâl with Terai Bamboos on the sites of the old jhums and mixed forest on the banks of streams and jhoras. There are only two mature Sâl-trees in this forest, which will be kept as seed-bearers, all the mature trees having been worked out by Mech wood-cutters from Goálpára.

(5) *Timber depôts.*—There are none at present, but one might be started at Manikerchar on the Kalu river near its junction with the Jingiram river.

(6) *Timber markets.*—Manikerchar and Eastern Bengal generally.

(7) *Lines of export.*—The Kalu river, which enters the Jingiram river a little below Manikerchar, thence down the Jingiram to Brahmaputra.

(8) *List of village or private lands remaining within the forest boundaries.*—There are no villages or cultivation inside the reserve.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—Protection is all that is contemplated for the present.

XIV.—*The Tura Forest Reserve.*—Notified in the *Assam Gazette* of the 10th November 1883, page 608, situated in mauza No. 3.

(1) *Area.*—One square mile, or 480 acres.

(2) *Boundaries*—

East.—A straight line from mound No. 1, on Rongrijhora, to mound No. 2, north of Tura cart-road, then along the cart-road to mound No. 3, near Prospect Point. Then a straight line from mound No. 3 to mound No. 4, on Rongkhonjhora.

South.—Down the Rongkhonjhora from mound No. 4 to mound No. 5.

West.—A straight line from mound No. 5, on Rongkhonjhora, to mound No. 6, at the side of the Tura cart-road, near its junction with the bridle path Then a straight line from mound No. 6 to mound No. 7, on Rongrijhora.

North.—Up the Rongrijhora from mound No. 7 to mound No. 1.

(3) *Soil.*—This reserve is a ridge close to the station of Tura, and has escaped jhuming, probably on account of the soil being very poor. The outcrops are trap and green stone, with here and there gneiss and a shallow surface soil of clay and vegetable matter.

(4) *Description of forest.*—Sâl forest with bamboos and some mixed forest on the banks of the streams and watercourses.

(5) *Timber depôt.*—Manikerchar on Kalu river.

(6) *Timber markets.*—Manikerchar and Lower Bengal.

(7) *Lines of export.*—Either by the cart-road down to Manikerchar, or part of the way by the cart-road, and from Damalgiri by the Kalu river, which enters the Jingiram just below Manikerchar.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map on the scale of four inches to one mile is filed in the office of the Gáro Hills division and that of the Conservator.

(11) *Working plan.*—The detailed examination of the forests will be made after all the tracts proposed as reserves in this district have been surveyed and demarcated.

GOÁLPÁRA FOREST DIVISION.

GOÁLPÁRA DISTRICT.

IX.—The Bentol and Darogaon Forest Reserve.—Notified in the *Assam Gazette* of the 28th July 1883, page 374, situated between the Gharbanda and Mura Bhur rivers.

(1) *Area.*—Eleven square miles, or 7,094 acres.

(2) *Boundaries*—

North.—A survey line from boundary-mound A, on the Gharbanda river, as shown in sheet No. 4 of the revenue survey map of the Goálpára district, to boundary-mound B, on the east or left bank of the Mura Bhur river.

West.—The Mura Bhur river from boundary-mound B to boundary-mound C, as marked on the map.

South.—A survey line north of the cultivation of Goragaon from boundary-mound C on the Mura Bhur river, to boundary-mound D, on the right or west bank of the Gharbanda river.

East.—The Gharbanda river from boundary-mound D to boundary-mound A.

(3) *Soil.*—Sandy soil, with pebbles and boulders in places and mixed with humus from the decaying vegetation. The sub-soil is of the same nature, but freer from humus, and in places is a pure white sand.

(4) *Description of forest.*—Almost a pure Sâl-forest, well stocked with poles and saplings, trees over 4 feet in girth are rare. Patches of grass land, with few or no trees on them, intervene; there is lower hill forest in narrow strips along the banks of the watercourses.

(5) *Timber depots.*—Garubasa, on the right bank of the Champamoti river, and another might subsequently be formed at the crossing of the Sidli and Datma road by the Gharbanda river.

(6) *Timber markets.*—Chanderdinga at the mouth of the Champamoti river, Dhubri, and Eastern Bengal generally.

(7) *Lines of export.*—The Gharbanda and Murabhur rivers, both leading to the Champamoti river, and thence to the Brahmaputra.

(8) *List of villages or private lands remaining within the forest boundaries.*—There are no villages or cultivated lands included in this reserve.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—Maps on the scale of four inches to the mile are under preparation, and will be filed in the office of the Goálpára division and that of the Conservator.

(11) *Working plan.*—The forest requires rest and protection from forest fires, as well as creeper-cutting. None but dead timber is being removed from the forest for the present

X.—The Bhumeswar Hill Forest Reserve.—Notified in the *Assam Gazette* of the 28th July 1883, page 374, situated between Kuja and Ghoga rivers:—

(1) *Area.*—Seven square miles, or 4,576 acres.

(2) *Boundaries*—

North.—The foot of the Bhumeswar Hill from boundary-mound A to boundary-mound B, as shown in sheet No. 8 of the revenue survey map of the Goálpára district.

West.—Along the foot of the Bhumeswar Hill from boundary-mound B to boundary-mound C; thence a survey line to boundary-mound D on the Kuja river, and down that river to boundary-mound E; thence along the foot of the hill to boundary-mound F.

South and East.—Along the foot of the Bhumeswar Hill from boundary-mound F to boundary-mound A.

(3) *Soil.*—Reddish-clayey loam and gravel, with pebbles and boulders in places, and mixed with more or less humus. The rock projects in places, consists of gneiss.

(4) *Description of forest.*—In the folds of the hill there is dense lower hill forest, consisting of numerous species of evergreen and other trees. The ridges and steeper slopes are well stocked with Sâl-poles and saplings. There are very few trees over four feet in girth. Portions of the hill have been jhúmed. In the plains portion, included within the reserve, the forest growth consists of dense and nearly pure Sâl-poles and saplings.

(5) *Timber depôts.*—A timber depôt might be established at the confluence of the Ghoga and Champamoti rivers, but there is none at present.

(6) *Timber markets.*—Chanderdinga, at the mouth of the Champamoti river, Dhubri, and Eastern Bengal generally.

(7) *Lines of export.*—The Ghoga, Kuja, Champamoti, and Brahmaputra rivers.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—Maps on the scale of four inches to the mile are under preparation, and will be filed in the office of the Goálpára Division and that of the Conservator.

(11) *Working plan.*—Protection, in addition to selection fellings of trees above four feet six inches in girth, is all that is contemplated for the present.

KÁMRÚP FOREST DIVISION.

KÁMRÚP DISTRICT.

XXXI.—The Hajo Forest Reserve.—Notified in the *Assam Gazette* of the 25th August 1883, page 425, situated on the north or right bank of the Brahmaputra river close to the police-station and town of Hajo and adjoining the Amingaon road :—

(1) *Area.*—226 acres.

(2) *Boundaries*—

West.—The surveyed and demarcated boundary of the *lákhiráj* estate attached to the Madhav Deváloi, and thence a line along the foot of the *khiráj* Kusabai hill, from a stone prism to another stone paism fixed at the south-western corner of Dharmesvar's estate.

North.—The surveyed and demarcated boundary of Dharmesvar's *nisf-khiráj* estate.

East.—The surveyed and demarcated boundary of the *lákhiráj* estate attached to the Madhav Deváloi.

South.—An unsurveyed line along the foot of the hill forming the northern boundary of the *nisfkhiraj* Pirpal estate attached to the Pao Mecca Musjid, and the surveyed and demarcated boundary of the *lákhiráj* estate attached to the Madhav Deváloi.

(3) *Soil.*—This consists of the decomposed gneiss rock of which the hill is formed. There is no vegetable mould at present, and portions of the hill are steep and rocky.

(4) *Description of forest.*—Thick young sâl forest over the greater portion of the hill, but there are no mature trees.

(5) *Timber depôts.*—Nagarbera and Dhubri, and, if necessary, a depôt could be established at Shoalkuchi.

(6) *Timber markets.*—Nagarbera, Dhubri, and Eastern Bengal generally.

(7) *Lines of export.*—The Brahmaputra river.

(8) *List of villages or private lands remaining within the forest boundaries.*—The only private land remaining within the boundaries of this forest is an area of three acres surrounding the mosque on Pao Mecca Hill, referred to below under (9), and the houses belonging to the Khadim and his followerers.

(9) *Rights of surrounding population.*—An area of three acres at the top of Pao Mecca Hill surrounding the mosque is assigned to the Khadim and his successors in office in perpetuity. The present path leading to the mosque on the west side of the hill to a breadth of six feet is excluded from the reserve, and a right of way is reserved to a small shrine to the east of the temple. The Khadim is permitted to collect firewood and thatching grass free of cost for the *bonâ fide* use of the mosque and the pilgrims who visit it, subject to such rules as may from time to time be made to ensure the safety of the reserve. He is also permitted to cut and collect, free of cost, under a pass, such dead Sâl timber or posts as may be necessary from time to time for the repair of the mosque and the out-houses attached to it, but such timber may not be taken down from the hill or used for any purposes besides those stated, subject also to the observance of due caution as regards fire, and attention to the Forest Rules. The Khadim and his followers are further permitted to collect fruits and fetch water from the hill on the distinct understanding that the Khadim will be held personally responsible for the acts of his followers and the pilgrims visiting the mosque. The right to all trees and other forest produce standing on the three acres of land set apart for the temple site is also vested in the Khadim absolutely, and this area is left revenue-free to him and his successors in office in perpetuity. All the above concessions are, it is to be understood, subject to such restrictions as may hereafter be prescribed.

(10) *Maps.*—A map on the scale of eight inches to one mile is filed in the office of the Deputy-Commissioner, in the office of the Kámrúp division, and that of the Conservator.

(11) *Working plan.*—The general protection of the forest from illegal felling or cutting and from fire is all that is contemplated at present.

SIBSÁGAR FOREST DIVISION.

SIBSÁGAR DISTRICT.

VII.—The Desai Forest Reserve.—Notified in the *Assam Gazette* of 24th November 1883, page 642, situated in the Noakachari and Debrapar mauza, and immediately adjoining the Nága Hills:—

(1) *Area.*—Eleven square miles, or 6,893 acres.

(2) *Boundaries*—

North.—A survey line, running from boundary mark 1, on the right bank of the Desai river in a north-easterly direction, and east of the Hulanguri tea-garden, to boundary-mark No. 5; thence a survey line running in an easterly direction, and south of Balijan tea-garden to boundary-mark No. 8, on the left bank of the Puti Noi; thence down this stream to boundary-mark No. 9, on its right bank; thence again a survey line to boundary-mark No. 13, on the left bank of the Teok nadi; thence up this stream to boundary-mark No. 14, on the same bank.

East.—From boundary-mark No. 14, along the Assiringia Nága path to boundary-mark No. 15, on the right bank of the Puti Noi.

South.—Down the Puti Noi from boundary-mark No. 15, on its right bank, to boundary-mark No. 16, on its left bank; thence a survey line running in a south-westerly direction to boundary-mark No. 21, on the right bank of Desai river.

West.—The Desai river from boundary-mark No. 21, on its right bank, to boundary-mark No. 1, on the same bank.

(3) *Soil.*—In places stiffish white clay, in others ferruginous loam.

(4) *Description of forest.*—Lower hill forest; the land is much broken up by deep ravines, on the slopes and top of which there are Nahor, Sam, Poma, and the Holong, whilst in the lower parts, the growth consists principally of bamboos.

(5) *Timber depôts.*—None at present.

(6) *Timber markets.*—The station of Jorhát and the sub-division of Jorhát generally.

(7) *Lines of export.*—The Desai and Puti Noi rivers.

(8) *List of villages or private lands remaining within the forest boundaries:*—
1 Moran village on the bank of the Desai (no name).
1 Nága village containing about 12 inhabitants (no name).

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map of the reserve on the scale of four inches to one mile is filed in the office of the Sibságar division and that of the Conservator.

(11) *Working plan.*—Protection is the only work contemplated at present.

VIII.—The Jhansi Forest Reserve.—Notified in the *Assam Gazette* of the 24th November 1883, page 642, situated in the Lahing and Gakhirkhowa mauza immediately adjoining the Nága Hills:—

(1) *Area.*—Twenty-nine square miles, or 18,380 acres.

(2) *Boundaries*—

North.—A demarcated survey line from boundary-mark No. 8, south of the Gabru tea-estate, to boundary-mark No. 1, on the left bank of the Jhansi river.

East.—The Jhansi river from boundary-mark No. 1, on its left bank, to its junction with the Tiru nadi; thence up this nadi to its junction with a small tributary stream, as shown in the map.

South.—Up the last-named small tributary, from its junction with the Tiru river to its source at boundary-mark No. 16; thence a survey line to boundary-mark No. 14, on the left bank of the Magrau nadi, thence down this stream to boundary-mark No. 13, on its right bank.

West.—A survey line from boundary-mark No. 13, on the right bank of the Magrau nadi, in a northerly direction, running east of the Narajan and Satai tea-gardens, to boundary-mark No. 8, south of the Gabru tea-estate.

(3) *Soil.*—Stiffish clay and ferruginous loam.

(4) *Description of forest.*—Certain parts of the forest are low, and there Ajhar and other trees growing on swampy soil are to be found. The greater portion of the land is, however, high, and in portions rising to 1,000 feet or more. In these parts, the forest is superior, consisting of Poma, Holong, Koroi, Hingori, Nahor, Sam, and other first-class trees.

(5) *Timber depôts.*—None at present.

(6) *Timber markets.*—Western part of the Sibságar sub-division and the eastern part of the Jorhát sub-division.

(7) *Lines of export.*—The Jhansi and Brahmaputra rivers.

(8) *List of villages or private lands remaining within the forest boundaries.*—None.

(9) *Rights of surrounding population.*—None.

(10) *Maps.*—A map of the reserve on the scale of four inches to one mile is filed in the office of the Sibságar division and also in that of the Conservator.

(11) *Working plan.*—For the present, protection of the forest only is contemplated.

Appendix II.

Schedule of Government Protected Forests added during 1883-84.

CACHAR FOREST DIVISION.

CACHAR DISTRICT.

Notified in the "Assam Gazette" of the 5th April 1884, page 144.

District.	Pargana or other sub-division.	Name of forest.	Description of boundaries.
Cachar ..	North Cachar Hills sub-division.	Kopili-Diyung forest	North and East.—Up the Diyung river from its junction with the Kopili river to its junction with the Langyen river. South.—Up the Langyen river from its junction with the Diyung river to its source on Phulang Peak, thence along the ridge forming the watershed between the Umrang and Langlai and the foot-path leading to the hot springs to where the latter meets the Gunjung-Jowai road, thence this road to the Kopili river. West.—Down the Kopili river from the Gunjung-Jowai road to its junction with the Diyung river.
Ditto ...	Ditto ...	Diyung-Mati forest...	East.—Up the Mahur river from its junction with the Diyung river to its junction with the Moti river, thence up the latter stream to its source near the old Asálu road. South.—The old Asalu road from the source of the Moti river to the point where it meets the Cachar-Gunjung road, thence along the latter to the Diyung river. West and North.—Down the Diyung river from the Cachar-Gunjung road to its junction with the Mahur river.
Ditto ...	Ditto ...	Mupa-Mahur forest...	North and East.—Up the Mupa river from its junction with the Mahur river to a point marked A on the map. South.—A survey line running from point A, in a south-westerly direction, to point B, on a small tributary stream flowing into the Terandui river at point C, and down the latter stream to its junction with the Mahur river. West.—Down the Mahur river from its junction with the Terandui river to its junction with the Mupa river.
Ditto ...	Ditto ...	Langting-Mupa forest.	North and East.—Up the Langting river from its junction with the Diyung river to its junction with the Sorudang river, thence up the latter stream to its source at point D, as marked on the map. South.—From the source of the Sorudang river at point D, a short survey line across the ridge or watershed in a westerly direction to the source of the Boila river, thence down the latter stream to its junction with the Mupa river. West.—Down the Mupa river from its junction with the Boila river to its junction with the Mahur river, thence down the latter stream to its junction with the Diyung river, and down this latter to its junction with the Langting river.

Appendix III.

Prohibition to clear land covered with trees in the protected forests in the North Cachar Hills.

No. 8.—In exercise of the powers conferred by Section 29 (*c*) of Act VII. of 1878 (the Indian Forest Act), the Chief Commissioner of Assam is pleased to prohibit the breaking up, or clearing for cultivation, for building, for herding cattle, or for any other purpose, of any land covered with trees in the Kopili-Diyung, Diyung-Mati, Mupa-Mahur, and Langting-Mupa protected forests in the North Cachar Hills.

Infringement of this prohibition will subject the offender to punishment under Section 32, Clause (*c*) of the Forest Act, which imposes for such an offence a penalty of imprisonment for a term which may extend to six months, or of fine, which may extend to Rs. 500, or both.

Appendix IV.

Statement showing the clearing of boundary-lines and repairing of boundary-mounds and the inspection done by the Divisional Officer in each Reserved and Protected Forest during the year 1883-84.

Names of Divisions and Forests.	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1883-84.		Length of artificial boundaries and demarcated natural boundaries not cleared in 1883-84.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1883-84.	Total number of boundary-marks not repaired in 1883-84.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.		Total length of artificial boundaries and demarcated natural boundaries not inspected by the Divisional Officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
GARO HILLS DIVISION.													
Dibru Hill Forest	7	10	7	10	....	....	9	9	....	7	10	....	....
Jinari "	8	45	8	45	....	....	5	5	....	8	45	....	....
Chima and Bangshi "	15	61	15	61	....	....	30	30	....	15	61	....	....
Dhima "	8	....	8	....	....	....	18	18	....	8	....	....	....
Dilma "	2	45	2	45	....	....	10	10	....	2	45	....	....
Raja Simla "	3	4	3	4	....	....	5	5	....	3	4	....	....
Ildek "	7	33	7	33	....	....	10	10	....	7	33	....	....
Dambu "	8	25	8	25	....	....	15	15	....	8	25	....	....
Darugiri "	5	18	5	18	....	....	10	10	....	5	18	....	....
Rangrengiri "	12	52	....	....	12	52	....	....	....	....	....	12	52
Emangiri "	4	5	4	5	....	....	11	11	....	....	....	4	5
Rowak "	3	55	3	55	....	....	6	6	....	....	....	3	55
Siju "	2	22	2	22	....	....	6	6	....	....	....	2	22
Begmara "	10	31	....	....	10	34	18	....	18	....	....	10	34
Bandrapara "	14	28	....	....	14	28	46	....	46	....	....	14	28
Tura "	1	15	1	15	....	....	8	8	....	1	15	....	....
Bolsalgiri "	2	32	2	32	....	....	9	9	....	....	....	2	32
Total.....	117	4	79	50	37	34	216	152	64	67	16	49	68
GOALPARA DIVISION.													
Bijni Duar Forest..	13	60	13	60	....	....	52	52	....	13	60	....	....
Chirang Duár (Eastern part) " ..	3	....	....	....	3	....	....	....	....	....	....	3	....
Ditto (Western part) " ..	5	....	5	....	....	....	26	26	....	5	....	....	....
Ripu Duár " ..	5	....	5	....	....	....	19	19	....	5	....	....	....
Guma Duár " ..	6	....	6	....	....	....	38	38	....	6	....	....	....
Sidli Duar " ..	42	40	33	40	10	....	146	90	56	27	....	16	40
Panbari and Pechadaveri " ..	8	....	8	....	....	....	40	40	....	8	....	....	....
Bengtol and Darogaon " ..	3	60	3	60	....	....	17	17	....	3	60	....	....
Bhumeswar Hill " ..	11	....	11	....	....	....	45	45	....	11	....	....	....
Total.....	99	..	86	....	13	....	383	327	56	79	40	19	40
KAMRUP DIVISION.													
Bar Duar Reserve.....	27	....	27	....	....	....	197	197	....	27	....	....	....
Pantan "	17	....	17	....	....	....	131	131	....	15	....	2	....
Matalkhar "	8	....	8	....	....	....	63	29	34	5	40	2	40
Kulsi Plantation "	4	....	4	....	....	....	37	37	....	4	....	....	....
Jara "	4	....	4	....	....	....	28	28	....	4	....	....	....
Milmilla "	15	....	15	....	....	....	124	124	....	15	....	....	....
Mayang "	20	....	20	....	....	....	148	148	....	14	....	6	....
Rani "	27	....	27	....	....	....	65	42	23	27	....	....	....
Kawa-sing "	20	....	20	....	....	....	63	54	9	20	....	....	....
Simla Hill "	4	....	4	....	....	....	23	23	....	4	....	....	....
Dumpara "	5	....	5	....	....	....	34	34	....	5	....	....	....
Khaksi, Sikrabura Hill "	17	....	17	....	....	....	140	140	....	17	....	....	....
Ghoraputa "	3	....	3	....	....	....	26	26	....	3	....	....	....
Khatkhari Hill "	7	....	7	....	....	....	53	53	....	7	....	....	....
Tareibari "	7	....	7	....	....	....	53	53	....	7	....	....	....
Garubaidha "	3	....	3	....	....	....	22	22	....	3	....	....	....
Khurkhuri "	3	....	3	....	....	....	20	20	....	3	....	....	....
Sursaria Hill "	7	....	7	....	....	....	29	29	....	7	....	....	....
Gizang "	4	....	4	....	....	....	32	20	12	2	....	2	....
Jaipur "	6	....	6	....	....	....	48	48	....	6	....	....	....
Baraibota "	5	....	5	....	....	....	46	46	....	5	....	....	....
Nampathar "	5	....	5	....	....	....	32	30	2	5	....	....	....
Barjuli "	11	..	11	....	....	....	45	30	15	11	....	....	....
Hajo "	2	64	2	64	....	....	19	....	19	2	64	....	....
Bura Gohain Protected Forest	4	47	4	47	....	....	30	15	15	4	47	....	....
Mogakhal " "	1	68	1	68	....	....	14	....	14	1	68	....	....
Jharikhuri " "	8	65	8	65	....	....	55	30	25	8	....	....	65
Jirang " "	5	32	5	26	....	6	80	....	80	....	....	5	32
Total....	252	36	252	30	....	6	1,657	1,409	248	233	59	18	97
DARRANG AND NOWGONG DIVISION.													
Kholahat Reserve	7	38	7	38	....	....	160	160	....	7	38	....	....
Deboka "	6	38	6	38	....	....	22	22	....	6	18	....	....
Diju "	11	56	11	56	..	....	262	262	....	11	56	....	....
Baripara "	2	40	2	40	....	....	49	49	....	2	40	....	....
Khaling Duár "	8	....	8	....	....	....	102	102	....	8	....	....	....
Char Duar Plantation "	17	10	17	10	....	....	....	....	....	17	10	....	....
Garumari "	1	65	1	65	....	....	39	39	....	1	65	....	....
Singri Hill "	....	29	....	29	....	....	5	5	....	....	29	....	....
Total	55	36	55	36	....	....	639	639	....	55	36	....	....
SIBSAGAR DIVISION.													
Mikir Hill Reserve	35	....	35	....	....	....	25	25	....	35	....	....	....
Holongapar "	11	60	11	60	....	....	23	23	....	....	....	11	60
Dirai "	17	40	17	40	....	....	43	....	43	9	75	7	45
Abhaypur "	18	20	6	40	11	60	34	30	4	6	40	11	60
Upper Dalgnrung "	6	....	6	....	....	....	7	7	....	6	....	....	....
Lower " "	4	40	4	40	....	....	8	8	....	4	40	....	....
Sola "	8	40	8	40	....	....	66	66	....	8	40	....	....
Nambor "	....	....	....	....	....	....	4	4	....	....	....	....	....
Desai "	12	40	9	....	3	40	21	15	6	....	....	12	40
Jhanai "	11	20	9	20	2	....	16	12	4	....	....	11	20
Total	125	20	108	....	17	20	249	192	57	70	35	54	65
LAKHIMPUR DIVISION.													
Parapara Forest	11	....	11	....	....	....	175	175	....	9	....	2	....
Upper Dehing "	50	....	50	....	....	....	436	436	....	16	....	34	....
Dehingmukh "	2	40	2	40	....	....	1	1	....	2	40	....	....
Jokal "	11	....	11	....	....	....	195	195	....	3	....	8	....
Jaipur "	13	....	11	50	1	30	269	269	....	2	....	11	....
Kudum "	7	40	7	40	....	....	55	55	....	5	....	2	40
Bhoriwa "	1	10	1	10	....	....	11	11	....	1	10	....	....
Railway Concession	13	43	13	43	....	....	53	53	....	3	....	10	43
Total	109	53	108	23	1	30	1,195	1,195	....	41	50	68	3
CACHAR DIVISION.													
Upper Jiri Reserve	8	30	8	30	....	....	72	72	....	1	....	7	30
Lower " "	3	32	3	32	....	....	36	36	....	....	....	3	32
Baruk "	14	9	14	9	....	....	142	142	....	4	74	9	15
Somai "	10	59	10	13	....	46	75	75	....	....	....	10	59
Katakhal "	19	6	19	6	....	....	221	221	....	....	....	19	6
Dhaleswar "	10	46	10	46	....	....	66	66	....	5	4	5	42
Inner Line "	2	55	2	55	....	....	26	26	....	1	10	1	45
Total	68	77	68	31	....	46	638	638	....	12	8	56	69
SYLHET DIVISION.													
Langai and singla Protected Forest ..	6	....	....	....	6	....	25	22	3	....	....	6	....

Appendix V.

Statement showing the Executive and Protective Charges of the Different Forest Divisions in the Province of Assam.

Name of Range and Officer in charge.	Head-quarters of beats.	No. of Forest Guards.	Description of work to be done by the Guards.
GÁRO HILLS DIVISION.	1. Mankachar ...	1	With Forest Ranger.
Sarat Chandra Roy, Forest Ranger, 6th grade.	2. Bagmara ...	1	With Forester, Southern Range.
Southern Range.	3. Moiskhola ...	1	Watching Moiskhola river and forests in the neighbourhood.
Gáro Hills district south of Tura.	4. Mahadeo ...	1	Watching Mahadeo river and forests in the neighbourhood.
1 Forester on Rs. 20 per mensem	5. Kanai ...	1	Watching Kanai river and forests in the neighbourhood.
	6. Gonasiri ...	1	Watching Gonasiri river and forests in the neighbourhood.
	7. Bagmara ...	1	Watching Someswari river and forests in the neighbourhood.
	8. Ghosegaon ...	1	Watching Nitai river and forests in the neighbourhood.
	9. Angertoli ...	1	Watching Buraghat river and Bandrapara Reserve.
	10. Dalu ..	1	Watching over the Bogai river and forest in the neighbourhood.
	11. Marsi ...	1	Watching Marsi river and forests in the neighbourhood.
	12. Porukosa ...	1	Watching Porukosa river and forests in the neighbourhood.
	13. Mohendragunge ...	1	Watching Jinjiram river and forests in the neighbourhood.
	14. Siju ...	1	Watching over the Siju and Roywak Reserves.
	15. Emangiri ..	1	Watching over Emangiri Forest.
Northern Range.	1. Damra ...	2	With Forester in charge of Northern Range.
Gáro Hills district north of Tura.	2. Bolsalgiri ...	1	Watching over the Bolsalgiri Reserve.
1 Forester on Rs. 20 per mensem	3. Putimari ...	1	Watching Kalu river and forests in the neighbourhood.
	4. Mankachar ...	1	Watching Kalu and Dorni rivers and forests in the neighbourhood.
	5. Sukchar ...	1	Watching Kalangkini river and forests in the neighbourhood.
	6. Salmara ...	1	Watching Jinjiram river.
	7. Bangalkata ...	1	Watching Dibru Hill Reserve and Rongia river.
	8. Nibari ...	1	Watching Jinari Reserve and river.
	9. Jirahat ...	1	Watching Kisnoi river and forests in the neighbourhood.
NOTE.—Out of the total number of 34 Forest Guards, 12 are on the list of temporary establishments.	10. Damra ...	1	Watching Dudnoi river and forests in the neighbourhood.
	11. Bhogobata ...	1	Watching Dhima Reserve.
	12. Rajasimla ...	1	Watching Dilma and Rajasimla Reserves.
	13. Atiabári ...	1	Watching Ildek and Rajasimla Reserves and Deosila river.
One Head Forest Guard on Rs. 10 per mensem, who can read and write, is stationed at Dalu and the other one at Salmara	14. Chima ...	1	Watching over the Chima and Bangshi Reserves.
	15. Dambu ...	1	Watching over the Dambu Reserve.
	16. Darugiri ...	1	Watching over the Darugiri Reserve.
	17. Songsak ...	1	Watching over the Songsak Reserve.
	18. Tura ...	1	Watching over the Tura Reserve.
GOÁLPARA DIVISION.	1. Barabada ...	1	With Forester in charge of Guma Range.
Guma Range.	2. " ...	1	Watching over the western part of Guma Reserve.
The Guma Reserve and all Protected and District Forests in the Gumaduár.	3. Suriamukh ...	1	In charge of depôt and watching over the southern part of Guma Reserve.
1 Forester on Rs. 20 per mensem	4. Ghosegáon ...	1	Watching over northern part of Guma Reserve
Western Range.	1. Kochugaon ...	2	With Forester in charge of Western Range.
	2. " ...	1	Watching over timber works by purchasers in Chirangduár.
	3. " ...	1	Watching over timber works by purchasers in Ripuduár.
All Reserved, Protected, and District Forests in the Ripu, Chirang, and Sidli duárs west of the Saralbhanga river.	4 Datma ...	1	Watching over the Tipkai river and forests in the neighbourhood.
1 Forester on Rs. 40 per mensem	5. Rajadabri ...	1	Watching over the Gorupila river and depôt for Western Range.
	6. Changbada ...	1	Watching over the Telcuma and Hail rivers and forests in the neighbourhood.
	7. Muktaigaon ...	2	Watching over the Sankos river and forests in the neighbourhood.

Statement showing the Executive and Protective Charges of the different Forest Divisions in the Province of Assam—(Continued.)

Name of Range and Officer in charge.	Head-quarters of beats.	No. of Forest Guards.	Description of work to be done by the Guards.
GOÁLPÁRA DIVISION—(*contd.*)			
Eastern Range.			
All Reserved, Protected, and District Forests in the Chirang, Sidli, and Bijniduárs east of the Saralbhanga river. Dina Nath Kar, Forest Ranger, 6th grade. 1 Forester on Rs. 20 per mensem	1. Gorubasa ...	1	With Forest Ranger in charge of Eastern Range.
	2. " ...	1	With Forester, Eastern Range.
	3. " ...	1	Watching over timber works by purchasers, Chirangduár.
	4. " ...	1	Watching over timber works by purchasers, Sidliduar.
	5. Soobaijhora ...	1	Watching over the Bijni Reserve and Protected and District Forests in the Bijniduar.
	6. Borogaon ...	1	Watching over the Bijni Reserve and Protected and District Forests in the Bijniduar.
	7. Bhumeshwar Hill	1	Watching over the Bhumeshwar Hill Reserve and District Forests in the neighbourhood.
	8. Bangtal ...	1	Watching over the Bangtal and Darogaon Reserves and District Forests in the neighbourhood.
	9. Patgaon ...	1	Watching over the western part of Sidli Reserve.
	10. Holtagaon ...	1	Watching over the southern part of Sidli Reserve and Gourang river.
	11. Gorubasa ...	1	Watching over the eastern part of Sidli Reserve and Champamati river.
	12. Bansbari ...	1	Watching over the northern part of Sidli Reserve.
KÁMRÚP DIVISION.			
Kulsi Range.			
Comprising the Barduar, Pantan, Kulsi Plantation, Milmillia and Mayang Hill Reserves and all the District Forests between the Bathanadi in the east and the Akchalia Hill, the Dimolinadi and the road from Shakhomuri to Ukiam in the west in the Kámrup district south of the Brahmaputra. Paniram Das, Forest Ranger, 6th grade.	1. Kulsi plantation...	1	With Forest Ranger in charge of Kulsi Range.
	2. Ditto ...	2	Supervising work at the Kulsi plantation.
	3. Dakuapara ...	1	Watching over northern part of Kulsi plantation Reserve and the Kulsi river.
	4. Kulsi plantation...	1	Watching over southern part of Kulsi plantation Reserve and the Kulsi river.
	5. Pathliapara ...	1	Watching over Block I. and northern part of Block II. of Barduar Reserve.
	6. Ghagrachak ...	1	Watching over southern part of Block II. and eastern part of Block III. of Barduar Reserve.
	7. Khokapara ...	1	Watching over eastern part of Block IV. and northern part of Block V. of Barduar Reserve.
	8. Modoki or Khopdia	1	Watching over eastern part of Block V. of Barduar Reserve.
	9. Rajapara ...	1	Watching over the southern part of Block V. of Barduar Reserve.
	10. Kotrabari ...	1	Watching over the western part of Blocks IV. and V. of the Barduar Reserve and eastern part of Pantan Reserve and the Kulsi river.
	11. Golia ...	1	Watching over the Blocks III. and IV. of Barduar Reserve.
	12. Barabokra ...	1	Watching over the central part of Pantan Reserve.
	13. Hatigarh ...	1	Watching over the northern part of Pantan Reserve.
	14. Ukiam ...	2	Watching over the southern part of Pantan Reserve.
	15. Buralanga ...	1	Watching over the Duran Block of the Pantan Reserve.
	16. Auguri ...	1	Watching over the southern part of Milmillia Reserve.
	17. Akchalia ...	1	Watching over the northern part of Milmillia Reserve.
	18. Rajapara ...	1	Watching over the Mayang Hill Reserve.
	19. Kukurmara ...	1	Watching over the Timber depôt and the traffic on the Kulsi river.
Rani Range.			
Comprising the Rani, Jara, Kawasing Hill Reserves, and eastern part of the Jirang Forest and all District Forest between the Chanchalpara and Hatigarh district road and Batha nadi in the west and the Shillong road in the east of the Kámrúp district south of the Brahmaputra. 1 Forester on Rs. 40 per mensem	1. Bahupara ...	1	With the Forester in charge of the Rani Range.
	2. Diochotal ...	1	Watching over the eastern part of Mayang Block of Rani Reserve.
	3. Chattergaon ...	1	Watching over the Mairakanda Block of Rani Reserve.
	4. Sazanpara ...	1	Watching over western part of Mayang Block of Rani Reserve.
	5. Tanganpara ...	1	Watching over the Jara Reserve.
	6. Nolapara ...	1	" " " eastern part of the Kawasing Reserve.
	7. Chanchalpara ...	1	" " " western part of the Kawasing Reserve.
	8. Gauháti ...	1	" " " Gauháti Forest Bungalow.

Statement showing the Executive and Protective Charges of the Different Forest Divisions in the Province of Assam—(Continued).

Name of Range and Officer in charge.	Head-quarters of beats.	No. of Forest Guards.	Description of work to be done by the Guards.
KÁMRÚP DIVISION—(*Contd.*) *Singra Range.* Comprising the Simla, Dumpara, Khaksi, Sikrabura, Ghoraputa, Khatkhati, Tareibari, Garubaldha, Khurkhuri, Sursuria, Gizang, Jaipur, Bardobha, Nampathar, and Barjuli Reserves, the Jharikhuri, Bura Gohain and Mogakhal Protected Forests, and all District Forests west of Akchalia Hill, the Dimolinadi and the road Shakhomuri to Ukiam in the Kámrúp district south of the Brahmaputra. 1 Forester on Rs. 20 per mensem.	1. Shakhomuri	1	Watching over the Simla, Dumpara, Khaksi, Sikrabura, and Ghoraputa Reserves.
	2. Rajapara	2	Watching over the Khatkhati, Tareibari, Garubaldha, Khurkhuri; and Sursuria Reserves.
	3. Bamnigaon	1	Watching over the Gizang, Jaipur, Baradobha, and Nampathar Reserves.
	4. Jarihat	1	Watching over the Borjuli Reserve and Luki district Forests.
	5. Singra Police Outpost.	1	Watching over the Jharikhuri, Bura Gohain, and Mogakhal Protected Forests.
Northern and Eastern Kámrúp Range. Comprising the Hajo Reserve and all the District Forests north of the Brahmaputra and those district Forests east of the Shillong road and south of the Brahmaputra in the Kámrúp district. 1 Forester on Rs. 40 per mensem.	1. North Gauháti.....	1	With Forester in charge of the Range.
	2. " "	1	With Forester carrying letters to and from Divisional Officer.
	3. Hajo	1	Watching over the Hajo Reserve.
	4. Sonapur.....	1	" export of forest produce by the Digru river and from the district forest east of the Shillong road south of the Brahmaputra.
Jirang Range. Comprising the Mataikhar Reserve, western part of the private forests in the Jirang, and the whole of the Nungspung estate in the Khási Hills, in which the Government is entitled to half the revenue, and all district forest between the Bathanadi in the west, and the Chanchalpara and Hatigarh district road in the north. 1 Forester on Rs. 40 per mensem.	1. Mataikhar.....	1	Watching over the southern part of the Mataikhar Reserve.
	2. Pokapani	1	Watching over the western part of the Mataikhar Reserve.
	3. Umsuru.....	1	Watching over the northern part of the Jirang and Nungspung Forests and the export of forest produce by the Batha nadi.
	4. Baklapara.....	1	Watching over the southern part of the Nungspung Forest and the export of forest produce by the Batha nadi.
	5. Horu Jirang.....	1	Watching over the eastern part of the Jirang Forests to prevent jhúming where sâl is growing.
NOTE.—Forester on Rs. 40 per mensem is kept on the list of temporary establishments, also 20 out of the total number of 44 Forest Guards.			
DARRANG AND NOWGONG DIVISION. *East Darrang Range.* Comprising the Nowduar reserve and all the district forests east of the Bhairabi river. 1 Forester on Rs. 40 per mensem.	1. Bishnath	2	With Forester in charge of the Range for watching over district forests.
	2. Rangajan	2	Watching over the Nowduar reserve and the Bhairabi river,
Central Darrang Range. Comprising the Charduar, Balipara, Singri, Garumari and Bhamaraguri Reserves, and all the District Forests east of the Panchnai and west of the Bhairabi river in the Darrang district. Saradendu Gosvami, Forest Ranger, sixth grade (on the list of temporary establishment). 1 Forester on Rs. 20 per mensem for plantations.	1. Dhekrigaon	1	With forest ranger in charge of East Darrang Range.
	2. Charduar Plantation	1	Watching over the Charduar rubber plantation.
	3. Sâl Forest ghat ...	1	Watching over the eastern part of the Balipára Reserve.
	4. Dhekrigaon ...	1	Watching over the western part of the Balipára Reserve and the Mansiri river.
	5. Garumari ...	1	Watching over the Garumari Reserve.
	6. Bamoni Hill ...	1	Ditto Bamoni Hill Plantation.
	7. Serajuli ...	1	Ditto Singri Hill Reserve.
	8. Bhairabighat ...	1	Ditto depôt and forest bungalow Bhairabighat.
West Darrang Range. Comprising the Khalingduar Reserve and all the District Forests west of the Panchnai river in the Darrang district. 1 Forester on Rs. 20 per mensem.	1. Bengbari	1	Watching over the eastern part of the Khalingduar Reserve.
	2. "	1	Ditto western ditto
	3. "	2	With Forester in charge of the Range for watching over District Forests.

Satement showing the Executive and Protective Charges of the Different Forest Divisions in the Province of Assam—(Continued.)

Name of Range and Officer in charge.	Head-quarters of beats.	No. of Forest Guards.	Description of work to be done by the Guards.
Nowgong Range.	1. Nowgong	1	With the Forest Ranger in charge of the Nowgong Range.
Comprising the Kholahat, Deboka, and Diju Reserves, and all the District Forests in the Nowgong district.	2. Misa	1	Watching over the northern part of the Diju Reserve.
	3 Borghat.....	1	Watching over the southern part of the Diju Reserve.
Jay Narayan Das, Forest Ranger, fourth grade.	4. Barigog.....	1	Watching over the eastern part of the Kholahat Reserve.
	5. Kholahat	1	Watching over the western part of the Khola hat Reserve.
	6. Burigaon	1	Watching over the Deboka Reserve.
	7. Nowgong	2	With Forest Ranger for watching over the District Forests.
SIBSÁGAR DIVISION. *Sibságar Range.*	1. Sibságar	1	With Divisional Officer.
	2. Ditto	1	With Forest Ranger in charge of Sibságar Range.
Comprising the Dirai, Abhaypur, and Sola Reserves, the Panidihinga Protected Forest and all the District Forests in the sadr sub-division of the Sibságar district.	3. Kacheymara ...	2	Watching over the Dirai Reserve and District Forest in the neighbourhood.
	4. Safrai	2	Watching over the Abhaypur and Sola Reserves and District Forests in the neighbourhood.
Dhananjay Chatterji, Forest Ranger, sixth grade.	5. Dimo ...	1	Watching over the eastern part of the Panidihinga Protected Forests and District Forests in the neighbourhood.
1 Forester on Rs. 20 per mensem (temporary establishment).	6. Disangmukh.....	1	Watching over the western part of the Panidihinga protected forest and District Forests in the neighbourhood.
	7. Sibságar	1	Watching over the Sibságar Forest Bungalow and Office.
	8. "	1	With Forest Ranger to watch over District Forests not near the Reserves or Protected Forests.
Jorhát Range.	1. Jorhát	1	With Forester in charge of Jorhát Range.
Comprising the Holongapar, Desai, and Jhansi Reserves and all the District Forests in the Jorhát sub-division of the Sibságar district.	2. Moriani	1	Watching over the District Forests west of the Desai river.
	3. Naginijan ...	2	Watching over the Desai and Holangapar Reserves and District Forests in the neighbourhood.
1 Forester on Rs. 40 per mensem.	4. Amgori	2	Watching over the Jhansi Reserve and District Forests in the neighbourhood.
1 ditto 20 ditto	5. Majuli	2	Watching over the District Forests in the Majuli.
Golághát Range.	1. Golághát	1	With Forest Ranger in charge of Golághát Range.
Comprising the Nambor and Mikir Hills Reserves and all District Forests in the Golághát sub-division of the Sibságar district and in the whole of the Nága Hills district.	2. Ohguri Control station.	2	Watching over the Nambor Reserve on both banks of the Dhansiri river.
	3. Jamugori ditto...	2	Watching over the Nambor Reserve on the left bank of the Dayang river and District Forests on the right bank of the Dhansiri rivers and Dayang.
Srigopal Banerji, Forest Ranger, fifth grade.	4. Daigurung ditto...	2	Watching over the Nambor Reserve on the right bank of the Daigurung river, the upper and lower Daigurung Reserves on the left bank of that river, and the District Forest in the neighbourhood
1 Forester on Rs. 20 per mensem (temporary establishment.)	5. Kanear in the Mikir Hills Reserve.	2	Watching over the Mikir Hills Reserve.
	6. Golághat	1	Ditto Golághát depôt and bungalow.
	7. "	2	With Forest Ranger to watch over District Forests not near the Reserves.
NOTE.—Out of the total number of 30 Forest Guards, 10 are on the list of temporary establishment.			
LAKHIMPUR DIVISION. *Dibrugarh Range.*	1. Dibrugarh.....	1	With the Forest Ranger in charge of Dibrugarh Range.
Comprising all the protected and District Forests within the following boundaries in the Lakhimpur district:—	2. Jokai	1	Watching over the Jokai protected Forest and District Forest in the neighbourhood.
North.—The Brahmaputra from Dehingmukh to Poba.	3. Panigaon	1	Watching over the District Forests between the Dehing and the Solagori Ali.
East.—The path from Poba to Teensukia and Tingrai.	4. Rangagora	1	Watching over the Parapara Protected Forest and the District Forests in the neighbourhood.
South.—The Dehing river from Tingrai to the Solagori Ali, thence the latter to the Sibságar district.	5. Teensukia	1	Watching over the District Forests on both banks of the Sessa and Tingrai rivers.
	6. Balabazar	2	Watching over the forest produce brought to Dibrugarh.
	7. Monamukh	1	Watching over the forest produce transported by the Brahmaputra and Dibru rivers
West.—The Sibságar district.	8. Doomgaon	1	Watching over the Dehingmukh protected forests and District Forests in the neighbourhood.
Kripa Nath De, Forest Ranger, sixth grade.	9. Dibrugarh.....	1	Watching over the Forest Bungalow.
1 Forester on Rs. 20 per mensem.	10. "	1	With Forester in charge of District Forests.

Statement showing the Executive and protective Charges of the Different Forest Divisions in the Province of Assam—(Continued.)

Name of Range and Officer in charge.	Head-quarters of beats.	No. of Forest Guards.	Description of work to be done by the Guards.
LAKHIMPUR DIVISION—(*Contd.*)			
Dumduma Range.			
Comprising all the Protected and District Forests within the following boundaries in the Lakhimpur district:—			
North.—The Brahmaputra from Poba to Dibongmukh.	1. Dumduma.....	1	With Forester in charge of Dumduma Range.
	2. "	1	Watching over the District Forests north of the Dibru and south of the Brahmaputra river.
East.—The Inner Line. *South.*—Pangarigarh Ali, Dibru river to Dumduma, thence railway to Teensukia.	3. Sadiya	1	Watching over the District Forests north of the Brahmaputra river and forest produce transported by that river.
West.—Path to Poba. 1 Forester on Rs. 40 per mensem.	4. Hilonimukh.....	1	Watching over Burisuti and Poba rivers and forests in the neighbourhood.
Makum Range.			
Comprising all the Protected and District Forests within the following boundaries in the Lakhimpur district:—	1. Margherita	1	With Forester in charge of Makum Range.
	2. "	2	Watching over the District Forests at the foot of the Nága Hills south of the Dehing river.
North.—The Solagori Ali from Sibságar district to Dehing, thence the latter to Tingrai, thence road to Teensukia and railway to Dumduma, thence Dibru river to Paugarigarh.	3. Railway junction...	1	Watching over the transport of Forest produce by Railway.
	4. Borbil	1	Watching over the eastern part of Upper Dehing Protected Forest and transport of forest produce by the Dibru river.
	5. Jaipur	2	Watching over the western part of the Upper Dehing and the Solagori Protected Forest and the District Forests between Dehing and Desang rivers.
East.—Nága Hills. *South and West.*—Sibságar district.	6. Teensukia	1	Watching over the northern part of the Upper Dehing Protected Forest and the District Forests near the Tingrai and Dehing rivers.
1 Forester on Rs. 40 per mensem. 1 Forester on Rs. 20 per mensem.	7. "	1	With Forester in charge of the District Forests.
North Lakhimpur Range.	1. North Lakhimpur..	1	With Forester in charge of N. Lakhimpur Range.
Comprising all the Protected and District Forests north of the Brahmaputra in the Lakhimpur district. 1 Forester on Rs. 20 per mensem.	2. " " ..	1	Watching over the Bhorolwa Protected Forest and the District Forests west of North Lakhimpur.
	3. Kuddum	1	Watching over the Kuddum Protected Forest and the District Forests east of North Lakhimpur.
NOTE.—Out of the total number of 30 Forest Guards, 16 are on the list of temporary establishments.	4. Dhoknakhana river	1	Watching Dhoknakhana river and forests in the neighbourhood.
	5. Dijmoore river.....	1	Watching Dijmoore river and forests in the neighbourhood.
	6. Sisi river	1	Watching over the Sisi river and forests in the neighbourhood.
CACHAR DIVISION.	1. Sonaimukh	1	With Forest Ranger in charge of Sonai Range.
Sonai Range.	2. "	2	Watching over the transport of forest produce on the Barak river and measuring or counting the same.
Comprising the Upper and Lower Jiri, the Barak, Sonai, and eastern half of the Inner Line reserve and the District Forests in the Cachar district, east of Silchar, also Sonaimukh Registering Station and Silchar Forest Revenue Station. Kailas Chandra Chatterji, Forest Ranger, 6th grade. 1 Forester on Rs. 20 per mensem.	3. Silchar	2	Watching at the Silchar Forest Revenue Station to ensure the payment of royalty and the forest bungalow.
	4. Nagdirgram	1	Watching over the Sonai Reserve and the transport of forest produce on the Sonai and Rukmini rivers.
	5. Monkush	2	Watching over the Barak Reserve and the transport of forest produce on the Barak river.
	6. Jirighat.....	2	Watching over the Upper and Lower Jiri Reserves, and the transport of forest produce on the Jiri river.
Matijuri Range.	1. Matijuri	2	With Forest Ranger in charge of Matijuri Range.
Comprising the Katakhal, Dhaleswari, and western half of the Inner Line Reserve and the District Forests in the Cachar district, west of Silchar and south of the Barak river.	2. "	2	Watching over the transport of forest produce on the Katakhal river and measuring or counting the same.
Matijuri Forest Revenue Station. 1 Forester on Rs. 20 per mensem. 1 Forester on Rs. 30 per mensem.	3. Cuttlicherra	1	Watching over the Dhaleswari Reserve.
	4. Boruncherra	1	Watching over the southern part of the Katakhal Reserve.
	5. Loharbund	1	Watching over the northern part of the Katakhal Reserve.

Statement showing the Executive and Protective Charges of the Different Forest Divisions in the Province of Assam—(Concluded.)

Name of Range and Officer in charge.	Head-quarters of beats.	No. of Forest Guards.	Description of work to be done by the Guards.
CACHAR DIVISION—(*Contd.*) *Siyaltek Range.*	1. Siyaltek.....	1	With Forest Ranger in charge of Siyaltek Range.
Comprising all the District Forests in the Cachar district, west of Silchar and north of the Barak river, and the control over the export of forest produce from the North Cachar hills, also Siyaltek Forest Revenue Station. Govinda Chandra De, Forest Ranger, 5th grade. 1 Forester on Rs. 20 per mensem.	2. "	2	Watching over the transport of forest produce on the Barak river, and measuring or counting the same.
	3. Kalain Bázár	1	Watching over the transport of forest produce on the Larang river.
	4. Borkhola	1	Watching over the transport of forest produce on the Jatinga river.
	5. Bikranpur.....	1	Watching over the transport of forest produce on the Arang river.
	6. Goomra	1	Watching over the transport of forest produce on the Goomra river.
	7. Jalalpur.....	1	Watching over the transport of forest produce on the Baleswar river.
NOTE.—Out of the total number of 25 Forest Guards, 5 are on the list of temporary establishments.			
KHASI AND JAINTIA HILLS DIVISION.			
Comprising the Saipung Reserve and the Forest included in the Government Estate at Shillong and at Riat Khwan. 1 Forester on Rs. 40 per mensem.	1. Shillong.....	1	Watching over the Shillong Plantation.
	2. "	1	" " " forests near Shillong.
	3. "	1	" " " " at Upper Shillong.
	4. Riat Khwan	1	" " " Riat Khwan Forests.
	5. Saipung.....	2	" " " northern part of the Saipung Reserve.
	6. Tangpui.....	2	" " " southern part of the Saipung Reserve.

Appendix VI.

KULSI PLANTATION MEMORANDUM.

Measurement of trees of the different species, details of expenditure incurred, and table showing the rainfall in 1883-84.

RUBBER PLANTATION OF 1874.

Eastern Block.

From the measurements of 40 dominant trees the following are the results, *viz.* :—

Number of trees measured.	Average height.	Average girth.
40	25′ 9″	2′ 2″

Amongst the trees measured, those noted below were the finest, *viz.* :—

No.	Height. Feet.	Girth. Feet.	Girth. Inch.
1	27	2	5
2	27	2	3
3	27	2	6
4	28	2	1
5	27	2	3
6	27	2	4
7	31	2	5
8	28	2	8
9	26	3	3

RUBBER PLANTATION OF 1878.

Western Block.

Number of trees measured.	Average height.	Average girth.
40	22′ 2″	2′ 5″

The following are amongst the best of the trees in this block :—

No.	Height. Feet.	Girth. Feet.	Girth. Inch.
1	24	2	4
2	23	2	4
3	22	2	2
4	23	2	1
5	22	2	5
6	24	2	1
7	28	5	0
8	24	3	9
9	24	2	11
10	24	3	2
11	24	2	5
12	25	2	5

The following was the expenditure in each block separately, *viz.* :—

Eastern Block.

	Rs.	A.	P.
Repairing fence	237	14	9
Cutting creepers	28	2	0
Clearing	230	14	0
Hoeing	33	0	0
Planting	73	9	3
Sowing	23	3	6
Cutting line	61	1	0
Total	687	12	6

Western Block.

	Rs.	A.	P.
Fencing	86	7	9
Cutting line	85	11	6
Clearing and hoeing	206	15	9
Preparing mounds	32	2	0
Transplanting	86	8	6
Tying plants to stakes	27	4	3
Watching at night	24	1	2
Fencing and planting Ceara Rubber	56	0	3
Total	605	3	2

TEAK PLANTATIONS.

COMPARTMENT, 1872.

Area 41 acres.

Measurements of trees planted in 1872 gave the following results, *viz.* :—

Number of dominant trees measured.	Average girth.
50	2′ 6″

The measurements of trees planted in 1873 gave the following results :—

Number of dominant trees measured.	Average girth.
50	2′ 2″

Amongst the largest and finest trees in these plantations are the following :—

Plantation 1872.

No.	Girth. Feet.	Inch.
1	2	8
2	2	9
3	3	0
4	3	4
5	2	11
6	2	11
7	2	11
8	2	9
9	3	3
10	2	9

Plantation 1873.

No.	Girth. Feet.	Inch.
1	2	8
2	2	8
3	2	3
4	2	9
5	2	9
6	2	11
7	2	7
8	2	4
9	2	10
10	2	7

The amount expended on these two plantations was Rs. 14-15-6, for creeper-cutting and running.

The number of dominant trees counted on one acre of land in compartment 1873 was 601.

COMPARTMENT 1874.

Area 17 acres.

Number of dominant trees measured.	Average girth.
50	2′ 2″

The following are the best amongst the trees measured:—

No.	Girth. Feet.	Inch.
1	2	4
2	2	4
3	2	7
4	2	4
5	2	5
6	2	3
7	2	5
8	2	6
9	2	6
10	2	4

COMPARTMENT 1875.

Area 60 acres.

Number of dominant trees measured	Average girth.	
	feet.	inches.
50	2	2

This compartment is very mixed and irregular, and the above shows the growth of those trees only which succeeded at first.

Amongst the best trees of those measured were as follows :—

No	Girth.	
	feet.	inches.
1	2	2
2	2	3
3	2	9
4	2	4
5	2	6
6	2	5
7	2	9
8	2	4
9	2	3
10	2	4

COMPARTMENT 1878.

Area 20 acres.

Number of dominant trees measured	Average height.	Average girth.	
	feet	foot.	inches.
60	36	1	2

The following are some of the best of those measured :—

No.	Height.	Girth.	
	feet	feet	inches
1	37	1	6
2	37	1	6
3	38	1	5
4	37	1	6
5	38	1	3
6	37	1	3
7	36	1	3
8	38	1	5
9	37	1	4
10	40	1	0
11	39	1	0
12	40		3

The expenditure was—

	Rs.	As.	P
Clearing	48	9	9
Sowing	10	1	9
Total	58	11	6

COMPARTMENT 1879.

Area 10 acres.

Number of dominant trees measured.	Average height	Average girth.
	feet	feet.
50	25	9

Amongst the best of these are the following :—

No	Height	Girth
	feet.	inches.
1	27	11
2	28	11
3	26	10
4	26	9
5	27	10
6	27	11
7	27	10
8	26	11
9	26	10
10	25	11
11	24	11
12	21	11

The expenditure was—

	Rs.	As.	P.
Clearing	16	2	0
Cutting creepers	4	12	6
Planting	0	6	0
Pruning	7	9	6
Total	28	14	0

COMPARTMENT 1881.

Area 20 acres.

Number of dominant trees measured.	Average height.		Average girth.
	feet.	inches.	inches.
50	22	9	9

The following are amongst the best of the trees in this block :—

No.	Height.		Girth.
	feet.	inches.	inches.
1	24	0	10
2	22	6	11
3	20	0	10
4	25	0	11
5	24	6	10
6	22	0	10
7	23	0	10
8	24	0	10
9	23	0	9
10	21	0	10

The expenditure was :—

	Rs.	As.	P.
Clearing	94	5	6
Planting	7	5	0
Pruning	3	1	9
Clearing Mahogany and Pithecolobium	41	11	6
Total	146	7	9

SISSU PLANTATION 1873.

Area 20 acres.

This compartment is a mixed plantation of Sissu, Poma, and Ajhar; the measurements of Sissu and Poma are given below, *viz.* :—

Sissu.

Number of dominant trees measured.	Average height.		Average girth,	
	feet.	inches.	foot.	inches.
50	27	9	1	2

Poma.

Number of dominant trees measured.	Average height.		Average girth.	
	feet.	inches.	foot.	inches.
60	32	5	1	7

The following are the largest and finest amongst the trees measured :—

Sissu.

No.	Height.		Girth.	
	feet.	inches.	feet.	inches.
1	33	0	1	5
2	32	0	1	4
3	29	0	1	3
4	31	0	1	6
5	30	0	1	4
6	30	0	1	4
7	29	6	1	7
8	30	0	1	7
9	32	6	1	11
10	32	6	1	4

Poma.

No.	Height.		Girth.	
	feet.	inches.	feet.	inches.
1	27	0	1	8
2	36	6	2	0
3	32	6	2	1
4	37	6	1	9
5	36	6	1	2
6	33	6	1	11
7	37	6	1	7
8	36	6	1	7
9	37	6	1	7
10	37	0	2	0

The expenditure on Sissu plantation was—

	Rs.	As.	P.
Clearing	70	0	10
Cutting creepers	12	0	0
Transplanting	3	15	0
Total	85	15	10

The expenditure on Bamboo plantation was—

	Rs.	As.	P.
Clearing	22	11	0
Preparing mounds	0	8	0
Planting	53	8	6
Total	76	11	6

The total expenditure on plantation work at the Kulsi during 1883-84 was the following:—

		Rs.	As.	P.
1	Rubber—			
	Eastern block	687	12	6
	Western "	605	3	2
2.	Teak	407	14	9
3.	Sissu	85	15	10
4	Bamboo	76	11	6
5	Clearing Cinchona plantation at Jirang	4	0	0
6	Experiment and exotic trees, *viz* — *Broussonetia papyrifera* and *Musa textilis*	15	14	0
7	Nurseries	261	1	9
8	Miscellaneous — Collection and despatch of seed	124	1	9
	Miscellaneous — Purchase of rain hats and jute	14	2	6
	Miscellaneous — " gunpowder	11	3	0
	Miscellaneous — Digging elephant trench	50	4	0
9	Establishment	227	13	0
	Grand total as per Summary	2,572	1	9

Annual rainfall at the Kulsi plantation:—

Month	1882-83	1883-84
April	2 55	6 64
May	10 31	17·22
June	9 59	17 59
July	10 03	15 55
August	15 84	7 37
September	7 74	7 95
October	17·29	0 27
November	0 13	.....
December	.....	0 68
January	0 5	0 15
February	0 9	0 64
March	0 46	2 88
Total	74 53	78 94

A. J. MEIN,

Deputy-Conservator of Forests, Kámrúp Division.

Appendix VII

CHARDUÁR CAOUTCHOUC PLANTATION MEMORANDUM, MEASUREMENTS, AND COUNTINGS OF TREES AND SEEDLINGS, DETAILS OF EXPENDITURE INCURRED, AND TABLE SHOWING THE RAINFALL IN 1883-84.

Measurements and counting of Trees and Vacancies made in April 1884.

Compartment	Between 5 & 10 feet	Between 10 & 15 feet	Between 15 & 20 feet	Between 20 & 25 feet	Between 25 & 30 feet	Between 30 & 35 feet	Between 35 & 40 feet	Between 40 & 45 feet	Between 45 & 50 feet	Vacancies.	Total.
1 ...	120	498	460	165	27	9	...	...	...	1	1,280
2 ...	25	489	401	208	85	19	14	1	...	1	1,243
3 ...	29	351	233	106	86	50	18	3	1	2	879
4 ...	37	702	579	267	110	45	12	16	...	...	1,768
5 ...	63	872	680	228	51	8	3	...	...	4	1,909
6 ...	24	498	459	134	41	1	...	...	...	...	1,157
7 ...	11	541	378	118	23	5	...	...	...	...	1,076
8 ...	6	484	375	192	44	2	1	...	...	...	1,104
9 ...	6	663	406	8	...	...	...	...	...	...	1,083
10 ...	38	443	409	1	...	...	...	...	...	22	913
11 ...	...	842	757	...	...	...	...	...	...	...	1,599
Total ...	359	6,383	5,137	1,427	467	139	48	20	1	30	14,011

Condition of the Nurseries at the end of 1883-84.

Number of compartment.	Area. Acres.	Number of seedlings.	Height. Greatest. ft.	ins.	Average ft.	ins.	Least. ft.	ins.
Old nursery in compartment No. 2	5·34	31,084	20	0	11	9	1	0
New ditto ditto ditto	0 42.	4,908	4	0	2	3	0	6
Old ditto ditto No. 3	4·08	37,029	20	0	9	5	1	6
New ditto ditto ditto	0·39	4,319	8	3	4	4	0	5
Nursery in compartment No. 9	4·13	36,368	19	0	8	4	6	0
Ditto ditto No. 10	9·36	70,506	15	0	8	2	4	0
Total	23·72	184,214						

Details of expenditure in the Charduar Caoutchouc plantation during 1883-84, as compared with that of 1882-83.

Particulars.	Amount, 1882-83. Rs.	As.	P.	Amount, 1883-84. Rs.	As.	P.
Establishments	503	1	6	179	13	3
Plantation fence (including guards for nurseries, &c.)	1,860	2	0	500	8	0
Collection, carriage, sowing, and transplanting various seed...	130	12	0	122	10	0
Clearing inspection paths of trees and jungle	1,762	1	0	1,674	15	0
" of lines, removing of stumps, repairing mounds, renewing stakes, and levelling paths	2,246	14	0	1,064	4	0
Nurseries, fencing, weeding, draining, &c.	905	14	0	649	6	0
Pruning of trees in lines	24	6	0	17	2	0
Planting out Rubber-trees (1,356 trees)	76	12	0	201	14	0
Miscellaneous	69	2	0	38	12	0
Cost of opening out compartment 12	.....			109	2	0
" completing compartment 11	.....			326	12	0
" repairing plantation buildings	.....			5	0	0
Commission on labour	17	13	0	.....		
Total	7,596	13	6	4,890	2	3

* Cost on 694 trees

Rainfall at the Charduár Plantation for 1883-84, as compared with the previous two years.

Months.	1881-82.	1882-83.	1883-84.
April	6·68	5·35	3·73
May	11·94	13·34	13·23
June	14·57	15·10	12·61
July	10·40	10·58	21·48
August	23·81	20·05	18·96
September	21·80	18·26	6·33
October	2·18	14·03	0·92
November	0·09	0·68	0·28
December	0·28	0·88	1·24
January	1·95	0·54	2·66
February	2·42	0·47	1·38
March	2·92	0·22	2·11
Total	99 04	99·50	84·93

T. J. CAMPBELL,

Offg. Assistant Conservator of Forests,
Darrang and Nowgong Division.

Appendix VIII.

Account of an Experimental Tapping of 50 Caoutchouc or Rubber-trees (Ficus elastica) in the Bálipára Government Reserve Forest, Darrang District, Assam, in 1884.

THE tapping was continued on the same principle as last year, no roots nor branches being touched, and the incisions on the trunk being two feet apart.

All of the trees looked healthy, and none the worse for last year's tapping. 26 of the trees were tapped again on last year's incisions, which the bark had not covered, whilst the remaining 24 were tapped between the old incisions.

The results are shown in detail in the accompanying tabular statement from which the following abstract has been made out:—

Locality.	Species.	How collected.	Trees previously tapped.		Trees never tapped before.*		Total.	
			Number and old or new incision.	Yield.	Number and old or new incision.	Yield.	Number and old or new incision.	Yield.
				S. C.		S. C.		S. C.
Valleys ...	Shikabor ...	Liquid ...	.....	.....	1 old incision	2 0	1 old incision	2 0
" ...	" ...	" ...	.....	.....	1 new do. ...	3 4	1 new do. ...	3 4
" ...	" ...	Dry ...	5 old incisions	2 13	4 old do. ...	2 10	9 old do. ...	5 7
" ...	" ...	" ...	2 new do. ...	1 12	3 new do. ...	2 10	5 new do. ...	4 6
" ...	Bogibor ...	Liquid ...	.....	.....	.....	.....	.....	.....
" ...	" ...	Dry ...	3 old do. ...	1 12	4 old do. ...	2 4	7 old do. ...	4 0
" ...	" ...	" ...	5 new do. ...	8 8	1 new do. ...	0 6	6 new do. ...	8 14
Crests of hills ...	Shikabor ...	Liquid ...	.....	.....	3 new do. ...	6 0	3 new do. ...	6 0
" ...	" ...	Dry ...	2 old do. ...	1 2	4 old do. ...	1 10	6 old do. ...	2 12
" ...	" ...	" ...	2 new do. ...	1 12	5 new do. ...	11 14	7 new do. ...	13 10
" ...	Bogibor ...	Liquid ...	.....	.....	.....	.....	.....	.....
" ...	" ...	Dry ...	1 old do. ...	0 8	2 old do. ...	0 14	3 old do. ...	1 6
" ...	" ...	" ...	2 new do. ...	1 4	.....	.....	2 new do. ...	1 4
		Old incisions	11	6 3	15	9 6	26	15 9
		New do. ...	11	13 4	13	24 2	24	37 6
		Total ...	22	19 7	28	33 8	50	52 15

* This heading has no reference to last year, but describes the condition of the trees when selected in the first instance.

AVERAGES.

											S. C
11 trees previously tapped gave				6 seers	3 chs.	of dry rubber from		old incisions		Average	0 9
11	"	"	"	" 13 "	4 "	"	"	new	"	"	1 $3\frac{3}{11}$
14	" not	"	"	" 7 "	6 "	"	"	old	"	"	0 $8\frac{3}{7}$
9	" "	"	"	" 14 "	14 "	"	"	new	"	"	1 $10\frac{4}{9}$
1	" "	"	"	" 2 "	0 "	liquid "	"	old	"	"	2 0
4	" "	"	"	" 9 "	4 "	"	"	new	"	"	2 5
50				52	15						
26 trees from old incisions gave				15 "	9 "	Average...		...	...	...	0 $9\frac{15}{26}$
24	"	new	"	" 37 "	4 "	"		...	...	...	1 $8\frac{2}{3}$

11 seers 4 chhataks of liquid rubber gave 4 seers of dry rubber.

The largest quantity of ball rubber extracted from any single tree was six seers from new incisions and one seer eight chhataks from old incisions; the least both from old and new incisions being four chhataks. However, these results are not fair to the yield of the tree, for as soon as the trees were tapped, before the liquid had time to coagulate, the rain came down heavily daily, and washed the liquid mass down the trunk of the tree.

Financially, too, the results are as unfavourable as the yield. To obtain labour, it was necessary to hold out more than usual inducements; the tapping thus cost Rs. 58, whilst the rubber only fetched at auction Rs. 43. In this instance, there is good reason to believe there was combination.

The price of rubber had fallen during the year owing to competition. The purchasing firms were informed that large quantities of rubber would soon be thrown on the market, and prices ranged in consequence between Rs. 55 and Rs. 75, as compared with last year's Rs. 80 to Rs. 115.

Regarding the possible yield of a rubber-tree, instances are well known in this district where a large tree has been tapped for the third time, and yielded between two and two and a half maunds. Subsequent tappings gave from four to ten seers, but these have not been carried over a sufficiently large number of years to lead to exact conclusions. Of course, this yield was obtained from a mode of tapping very different to what is departmentally adopted: roots, branches, and trunk, receiving as many incisions as they were capable of bearing.

In the forests of this district, at least 75 per cent. of the existing Rubber-trees have been tapped, and the bark has grown over the incision wherever the period of rest has been sufficiently long.

FOREST DEPARTMENT, ASSAM, DARRANG AND NOWGONG DIVISION.

Statement showing the Results of an Experimental Tapping of 50 Rubber-trees in the Bálipára Reserve, Darrang District, in 1884.

No. of tree.	Measurement of trees. Height of tree.	Girth, including aërial roots.	Diameter of crown.	Locality and nature of soil	Kind of tree.	Rubber extracted in balls or loaves.	Condition of tree.	Date. Tapped.	Collected.	Yield from each tree. M. S. C.	Remarks.
1	99′	28′	92′	Valley of Balijuli, sandy loam, with pebbles.	Shikabor..	Ball ...	Good, was never tapped, 2 main aërial roots ...	25th April 1884.	27th April 1884.	0 0 10	Old incision.
2	91′	27′	84′	Side of hill near Sonai river, sandy loam	" ...	Loaf ...	Ditto ditto 2 ditto ...	27th " ...	28th " ...	0 2 0	New "
3	90′	35′	88	Ditto ditto ditto ...	" ...	" ...	Ditto ditto 4 ditto ...	" " ...	" " ...	0 1 8	" "
4	110′	36′	87′	Valley of Sonai river, low, sandy loam...	" ...	Ball ...	Ditto ditto 4 ditto ...	" " ...	" " ...	0 1 0	" "
5	90′	48′	80′	Bank of ditto ditto ...	" ...	" ...	Ditto ditto 3 ditto ...	" " ...	" " ...	0 0 10	" "
6	97′	28′	89′	Valley of Jaonjajuli, low, sandy loam ...	Bogibor...	" ...	Ditto ditto 3 ditto ...	26th " ...	" " ...	0 0 8	Old "
7	105′	28′	90′	Ditto ditto ditto ...	" ...	" ...	Ditto ditto 2 ditto ...	" " ...	" " ...	0 0 6	New "
8	122′	138′	151′	Ditto ditto, ditto ...	" ...	" ...	Very good, loaf rubber extracted by Mr. Martin years ago, 18 main aërial roots.	" " ...	" " ...	0 0 12	Old "
9	100′	28′	68′	Valley of Satai Nadi, low, sandy loam...	" ...	" ...	Good, was never tapped, 3 main aërial roots ...	" " ...	" " ...	0 0 8	" "
10	122′	83′	110′	South of Guinuja Hills, low, ditto ...	Shikabor..	Loaf ...	Very good, was never tapped, 6 main aërial roots.	" " ...	27th " ...	0 2 0	" "
11	122′	40′	102′	Valley of Balijuli, low, ditto ...	Bogibor ..	Ball ...	Good, was never tapped, 2 main aërial roots ...	" " ...	" " ...	0 0 8	" "
12	91′	.....	.....	Foot of Guinuja Hills, low, ditto ...	Shikabor..	" ...	Good, loaf rubber extracted by Mr. Martin years ago, a few marks remain, 4 main aërial roots.	23rd " ...	26th " ...	0 0 8	" "
13	118′	27′	89′	Right bank of Koliajuli, near Mansiri, land, low rich sandy loam.	" ...	" ...	Good, was never tapped, 2 main aërial roots ...	" " ...	" " ...	0 1 8	" "
14	99′	54′	85′	Left bank of Koliajuli, low. rich, sandy loam.	Bogibor ..	" ...	Good, loaf rubber extracted by Mr. Martin years ago, very few marks left, 8 main aërial roots.	20th " ...	23rd " ...	0 0 8	" "
15	100′	75′	134′	Ditto ditto ditto ...	Shikabor.	" ...	Ditto ditto 6 main aërial roots...	21st " ...	24th " ...	0 0 10	" "
16	100′	44′	88′	Ditto ditto ditto ...	" ...	" ...	Ditto ditto 2 ditto ...	" " ...	" " ...	0 1 4	New "
17	89′	68′	113′	Left of Chaojuli, slightly elevated, rich, sandy loam.	" ...	" ...	Ditto ditto 3 ditto ...	" " ...	" " ...	0 0 12	Old "
18	112′	76′	114′	Left of Chaojuli, low, rich sandy loam .	Bogibor ..	" ...	Ditto ditto 6 ditto ...	" " ...	" " ...	0 2 4	New "
19	80′	25′	63′	Ditto ditto ditto ...	" ...	" ...	Ditto ditto 3 ditto ...	" " ...	" " ...	0 0 8	Old "
20	120′	35′ 6″	124′ 6″	Valley of Chaojuli, low, rich sandy loam	Shikabor..	" ...	Ditto ditto 4 ditto ...	" " ...	" " ...	0 1 1	" "
21	98′	101′	105′ 3″	Left bank of Chaojuli, ditto ...	Bogibor ..	" ...	Ditto ditto 6 ditto ...	" " ...	" " ...	0 0 8	New "
22	120′	69′ 6″	91′	Right Koliajuli, ditto ...	" ...	" ...	Ditto ditto 11 ditto ...	" " ...	" " ...	0 1 0	" "
23	120′	71′	115′	Ditto ditto ditto ...	Shikabor..	" ...	Very good, was never tapped. 15 main aërial roots.	22nd " ...	25th " ...	0 1 0	" "

No. of tree.	Measurement of trees: Height of tree	Girth, including aerial roots.	Diameter of crown	Locality and nature of soil.	Kind of tree	Rubber extracted in balls or loaves	Condition of tree.	Date: Tapped	Collected	Yield from each tree.	Remarks.
24	97′	.....	.....	Right bank of Kohajuli, top of steep hill, sandy loam.	Shikabor	Ball ...	Good, was never tapped, 8 main aerial roots .	22nd April 1884	25th April 1884	0 0 4	Old incision.
25	100′	113	118′	Ditto ditto side of ditto...	" ...	" ...	Very good, was never tapped, 20 main aërial roots	" " ...	" " ...	0 2 0	New "
26	100′	20′	66′	Ditto ditto top of ditto...	" ...	" ...	Ditto ditto 1 main aerial root ...	" " ...	" " ...	0 0 6	Old "
27	97′	25′	100′	Ditto ditto side of ditto...	" ..	" ...	Good was never tapped, 3 ditto ...	" " ...	" " ...	0 0 6	" "
28	81′	20′	56′	Top of steep hill, sandy loam ...	Bogibor...	" ...	Ditto ditto 1 ditto ...	" " ...	" " ...	0 0 6	" "
29	124′	101′ 6″	79 6″	West of Chaojuli, top of hill, sandy loam	Shikabor	" ...	Very good, was tapped, a few marks left, 8 main aerial roots	" " ...	" " ...	0 0 8	New "
30	126′	37′	82′	Ditto ditto ditto ...	" ...	" ...	Good was tapped, a few marks left, 3 main aerial roots	" " ...	" " ...	0 0 6	Old "
31	90′	58′	70′	Ditto ditto ditto ...	Bogibor...	" ...	Ditto ditto, 4 main aërial roots ..	" " ...	" " ...	0 0 4	New "
32	84′	27′ 6″	81′ 6″	Kohajuli hills, top of hill, sandy loam.	Shikabor	" .	Good, was never tapped, 1 ditto ...	" " ..	" " ...	0 0 4	" "
33	99′	42′	78′	Ditto foot of hill ditto ...	" ...	" ..	Ditto ditto 4 ditto ...	" " ...	" " ...	0 0 4	Old "
34	100′	38′	77′	Ditto ditto ditto ..	" ...	" ...	Ditto ditto 3 ditto ...	" " ...	" " ...	0 0 4	" "
35	92′	29′	90 6″	West of Chaojuli, " ditto ..	" ..	" ...	Good, was tapped, a few marks left, 4 main aerial roots	" " ...	" " ...	0 0 4	" "
36	99′	60′	98′	Valley of Kermerijuli, slightly elevated, sandy loam	" ...	" .	Good, was never tapped, 4 main aerial roots ...	21st " ...	24th " ...	0 0 10	" "
37	100′	74′	80	Ditto ditto ditto ...	" ..	"	Good, was tapped, a few marks left, 6 main aerial roots.	" " ...	" " ...	0 1 4	New "
38	98′	41′	67′ 6″	Valley of Kohajuli, sandy loam ...	" ...	Loaf ...	Very good, was never tapped, 4 main aërial roots	" " ...	22nd " ..	0 3 4	" "
39	98′	33′	65′	Kohajuli hills, top of a hill, sandy loam	Bogibor...	Ball ...	Good was tapped, a few marks left, 3 main aerial roots	" " ...	24th " ...	0 0 8	Old "
40	90′	92′	146′	Valley of Kermerijuli, sandy loam ..	" ..	" .	Ditto ditto ditto. 6 main aërial roots	" " ...	" " ...	0 2 4	New "
41	88′	41′	73′	Ditto ditto ditto ...	" ...	" ...	Good, was never tapped, ditto, 5 main aërial roots	" " ...	" " ...	0 0 12	Old "
42	97′	74′ 6″	195′	Mouth of Chaojuli, ditto ...	" ...	" ..	Good, was tapped, a few marks left, 12 main aerial roots	20th " ...	23rd " ...	0 2 8	New "
43	72′	84′ 6″	86′ 9″	Right bank of Kohajuli, ditto ...	Shikabor	" ...	Ditto ditto ditto 9 main aerial roots	" " ...	" " ...	0 0 8	" "
44	90′	26′	77′	Ditto ditto, top of hill ...	" .	Loaf ...	Good, was never cut 4 main aerial roots ...	22nd " ...	" " ...	0 2 8	" "
45	100′	31′	61′	Kohajuli hills, top of hill, sandy loam ..	" ...	Ball ...	Ditto ditto 5 ditto ...	23rd " ...	26th " ...	0 0 6	" "
46	100′	107′	140′	Ditto ditto ditto ...	" ...	" ...	Ditto ditto 12 ditto ...	" " .	" " ...	0 6 0	" "
47	100′	71′	97′	Ditto ditto ditto ...	" ...	" ...	Very good, was never cut, 2 main aerial roots .	" " ...	" " ...	0 3 0	" "
48	99′	40′	60′	Ditto ditto ditto ...	Bogibor...	" ...	Ditto ditto, 9 ditto ...	22nd " ...	25th " ...	0 0 8	Old "
49	129′	92′	124′	Ditto side of hill, ditto ...	" ...	" ...	Ditto was tapped, a few marks left, marks on roots very prominent, 10 main aërial roots.	23rd " ...	" " ...	0 1 0	New "
50	120′	40′	103′	Right bank of Kohajuli, ditto. ...	Shikabor	" ...	Ditto ditto ditto, 1 main aërial root	22nd " ...	" " ...	0 0 6	Old "
									Total ...	1 12 11	

Appendix IX.

Rules for District Forests in the Assam Valley Districts and Sylhet and Cachar.

No. 35.—In exercise of the powers conferred by Section 41 of Act VII. of 1878 (the Indian Forest Act), the Chief Commissioner of Assam is pleased to make, and, with the sanction of the Governor-General in Council, to publish, the following rules, which shall come into force at once:—

Rule VI. of the Rules of the 13th April 1883, for District Forests in Sylhet and Cachar, and Rule VII. of the Rules of the same date for District Forests in the Assam Valley Districts, are hereby cancelled.

I.—All timber and other forest produce, in respect of which there is reason to believe that any money is payable to Government on account of the price thereof, or on account of any royalty or charge due thereon, when in transit in any part of the Province of Assam, may be stopped and examined by any Forest Officer, and all persons in charge of such timber or other forest produce shall be bound to produce any permit or certificate or pass which may have been granted to them for its removal, when called upon to do so by such Forest Officer.

II.—Any person refusing or neglecting to produce a permit, certificate, or pass when called upon to do so in accordance with the foregoing rule, shall be punished with imprisonment of either description, which may extend to one month, or with fine which may extend to Rs. 100, or with both.

Appendix X.

Rules for Protected Forests in Sylhet and Cachar.

No. 21.—In exercise of the powers conferred by Section 31 of Act VII. of 1878 (the Indian Forest Act), the Chief Commissioner of Assam is pleased to make, and, with the sanction of the Governor-General in Council, to publish, the following rules, which shall come into force on and from the 1st July next:—

I.—No timber or other forest produce shall be cut or removed from the protected forests in the districts of Sylhet and Cachar without a license in such form as the Chief Commissioner may from time to time prescribe.

II.—There shall be two descriptions of licenses, one for timber or other forest produce removed for purposes of trade, and the other for timber and other forest produce removed by ryots for their own use.

III.—Trade licenses may be obtained from the Deputy-Commissioner, or any other officer authorised by him in that behalf, and shall be charged for at the following rates:—

Each trade license to cut timber or other forest produce for 6 months or any shorter period terminating on the 30th September or on the 31st March ..... Re. 1
Each license for one elephant to drag timber for one year or for any shorter period terminating on the 31st March ..... „ 1

All timber and other forest produce removed under these licenses is subject to the rules and regulations prescribed in the Sylhet and Cachar River Rules.

IV.—Licenses to ryots to supply themselves with timber and other forest produce exclusively for their own use may be obtained from the tahsildars, or such other officers as may be authorised by the Deputy-Commissioner in that behalf, and shall be charged for at a rate not exceeding the following:—

Each license per house (*khána* not *bari*) for the financial year (from the 1st April to the 31st March) or for any shorter period terminating on the 31st March ..... As. 8

V.—A license granted under the next preceding rule does not authorise the removal of reserved timber, nor shall timber or any other forest produce be removed by the authority conveyed in such license, if the latter, is or is stated to be, in the hands of some other person.

VI.—All timber and other forest produce passing out of the protected forests may be stopped for examination by any Forest or Police Officer, and all persons in charge of such timber or other forest produce shall be bound to produce any license which may have been granted to them under these rules when called upon to do so by such Forest or Police Officer.

N B—Infringement of these rules will subject the offender to punishment under Section 32, Clause (*h*) of the Forest Act, which imposes for their breach a penalty of imprisoment for a term which may extend to six months, or of fine, which may extend to Rs 500, or both.

SYLHET RIVER RULES.

No. 22.—In exercise of the powers conferred by Section 41 of Act VII. of 1878 (the Indian Forest Act, 1878), the Chief Commissioner of Assam is pleased to make, and, with the sanction of the Governor-General in Council, to publish, the following rules, which shall come into force on and from the 1st July next :—

I. All words used in these rules and defined in Act VII. of 1878 (the Indian Forest Act, 1878) shall be deemed to have the meanings respectively attributed to them by the said Act.

II. Passes may be granted for all timber and other forest produce brought down by the rivers Langai and Singla, in the district of Sylhet, at the Páthairkándi Tahsil office, or at such other revenue stations on any other rivers in Sylhet as the Chief Commissioner may from time to time notify in the *Assam Gazette*.

III. All amounts due to Government in respect of such timber or forest produce, whether as duty, royalty, or on any other account, shall be paid into the Páthairkándi Tahsil office, or at such other places as the Chief Commissioner may, from time to time, by notification in the *Assam Gazette*,

prescribe: the Forest Officer shall thereupon, if requested to do so by the person in charge of such timber or forest produce, grant a pass for the same, in such form as the Chief Commissioner may from time to time prescribe.

IV. If such timber or other forest produce is brought from private land in British India, in respect of which the Government has not the right to levy a royalty or other payment, and accordingly nothing is due to Government thereon, the Forest Officer shall grant a pass for the same on production of a certificate in the form appended to these rules, and signed by the owner of the land whence the timber or other forest produce has been derived, or by his agent authorised in that behalf. Such certificate, if a pass has been granted in exchange for it, shall be retained by the officer granting the same, provided that the Forest Officer may decline to grant such pass if he has reason to believe the certificate to be false.

V. For the issue of such passes, fees will be levied as follows :—

	Rs.	As.	P.
(1) For every raft of timber or bamboos or boat carrying timber or bamboos, and for every raft or boat carrying charcoal	1	0	0
(2) For raft of canes or boat carrying canes	0	8	0
(3) For every raft of thatching-grass and reeds or *ekra* or boat carrying the same	0	4	0

Provided that no fees shall be levied for passes granted in respect of timber and other forest produce brought from private land in British India.

VI. No person shall move any timber or other forest produce for sale below any of the said stations, until a pass has been granted by the Forest Officer.

VII. Should the persons in charge of any timber or other forest produce, brought down the Langai and Singla rivers, or any other rivers in Sylhet, which the Chief Commissioner may from time to time notify in the *Assam Gazette*, desire to land such timber or other forest produce before reaching the said stations, they shall obtain the permission in writing of the Forest Officer. If that officer deem fit to grant such permission, he shall examine and measure the timber and other forest produce, and shall grant a pass as hereinbefore prescribed.

VIII. Except with the permission in writing of the Forest Officer, no timber or other forest produce in transit on the Langai and Singla rivers, or any other rivers in Sylhet which the Chief Commissioner may from time to time notify in the *Assam Gazette*, may be landed or removed inland, nor may such timber be cut up or converted before a pass has been granted by the Forest Officer for the same.

IX. All timber and other forest produce which is brought down the Langai and Singla rivers, or any other rivers in Sylhet which the Chief Commissioner may, from time to time, notify in the *Assam Gazette*, may be stopped and inspected by any Forest Officer or Police Officer; and all persons in charge of such timber or forest produce shall be bound to produce any passes which may have been granted to them under these rules, when called upon to do so by such Forest Officer or Police Officer.

X. Any person infringing any provision of these rules shall be punished with imprisonment of either description, which may extend to six months, or with fine, which may extend to Rs. 500, or with both.

Certificate of Origin required under provisions of the Sylhet River Rules for private timber or other forest produce.

1. Name, caste, and father's name of the owner of the land whence the forest produce covered by this certificate was derived.

2. Residence of the owner of the land whence the forest produce covered by this certificate was derived.

3. Name of village or estate where the timber or other forest produce was cut.

4. Description of timber or other forest produce.

5. Amount of timber or other forest produce.

6. Name, caste, father's name, and residence of person in charge of timber or other forest produce.

7. Destination to which the cargo is to be conveyed.

I, A. B., son of C. D., the person named in the first entry above (or his agent duly empowered to grant this certificate), do hereby declare that the timber (or other forest produce as the case may be), specified in this certificate, was cut upon my (or my principal's) private land, and that no portion of the said timber (or other forest produce, as the case may be) is the property of Government or produced on Government land.

(Sd. A. B.)

Appendix XI.

Rules for District Forests in the Jaintia Hills.

In supersession of all previous orders, the Chief Commissioner has been pleased to make the following rules for regulating the removal of forest produce from Government district forests in that part of the Jaintia Hills which is included within the following boundaries:—

South.—The Sylhet district.

East.—The boundary of North Cachar.

North.—The Simleng river to its junction with the Lukah river: the Lukah river to its junction with the Ka-wi-um: thence the crest of the range of hills south of Narpo running first due west, and then south-west to the peak Soharaja; then due west down on a spur of the range running to the junction of the Prang and the Mantadu rivers.

West.—The river Mantadu or Hari to its exit in Sylhet.

Definitions.

I.—The term "forest produce" includes wood, bamboos, canes, charcoal, thatching-grass, reeds, and leaves.

The term "Government district forests" comprises all unoccupied land, the property of Government, within the above boundaries, upon which forest produce grows or is manufactured, and which is neither "reserved" nor "protected" under Act VII. of 1878.

Grant of permits.

II.—Permits may be granted for the removal of forest produce from the Government district forests in the Jaintia Hills.

Description of permits.

III.—There shall be two descriptions of permits,—one for timber and other forest produce removed for the purposes of trade, and the other for timber and other forest produce removed by ryots for their own domestic use. They shall be granted in such forms as the Chief Commissioner may from time to time prescribe.

Trade permit and fees to be paid for it

IV.—Trade permits shall be granted by the Deputy-Commissioners of Sylhet and Khási and Jaintia Hills, or the Assistant-Commissioner of Jowai, or any other officers authorised by them in that behalf, and shall be charged for at the following rates:—

Each trade permit to cut timber or other forest produce for six months or any shorter period terminating on the 30th September or on the 31st March	1 rupee.
Each permit for one elephant to drag timber for one year or any shorter period terminating on the 31st March	1 "

All timber and other forest produce removed under these permits must be paid for, in addition to the amount charged for the permit, according to the rates fixed in Notification No. 30, dated the 20th December 1882, reproduced below, before removal.

Home consumption permit and fee to be paid for it.

V.—Permits to ryots to supply themselves with unreserved timber and other forest produce exclusively for their own domestic use shall be granted as follows:—

To ryots in the Jaintia Hills by the Assistant Commissioner of Jowai: to ryots in Sylhet by the tahsildar of Kanairghat, or other officer duly empowered by the Deputy-Commissioner in that behalf. Permits granted to Santengs by the Assistant-Commissioner at Jowai shall be given free of cost. Those granted in Sylhet shall be charged for at a rate not exceeding the following rate:—

Each permit per house (*khána* not *bári*) for the financial year (from the 1st of April to the 31st of March) or any shorter period terminating on the 31st of March for ryots holding Government land in the Jaintia parganas	8 annas.
For other persons	1 rupee.

Exclusion of reserved trees from, and necessity for, carrying permit when removing forest produce.

VI.—Such permit shall not authorise the removal of reserved timber, or of forest produce for purposes of sale, nor shall timber or any other forest produce be moved by the authority conveyed in such permit, if the latter is, or is stated to be, in the hands of some other person.

Stoppage and examination of timber, &c., by any forest officer, and the production of permits.

VII.—All timber and other forest produce, when in transit, may be stopped and examined by any forest officer, Dolloi, or police officer, and all persons in charge of such timber or other forest produce shall be bound to produce any permit which may have been granted to them for its removal, when called upon to do so by such forest officer, Dolloi, or police officer.

Penalty.

VIII.—Any person who, without a permit, removes timber or other forest produce from a Government forest in the Jaintia Hills will be prosecuted for theft, and the tools and implements used for the felling and removal, as well as the timber or other forest produce itself, will be confiscated.

Notification, dated the 20th December 1883.

No. 30.—In supersession of the rates of royalty to be paid on all forest produce, the property of Government or which was produced on Government land, or on lands belonging to or in the occupation of private persons on which the Government has the right to levy a royalty as published in the Revenue Department Notification No. 1, of the 11th January 1882, the Chief Commissioner is pleased to prescribe the following rates for the districts of Sylhet and Cachar, with effect from the 1st January 1883:—

	Rs.	A.	P.
(1) For every cubic foot of timber in the rough of the following kinds:—			
Jarul Nagessar, Cham, Gandrai	0	4	0
Kurta, Rata, Poma, Jhoki, Tailo, Shundi, Karal, Jam, Ping	0	3	0
All other kinds per cubic foot	0	1	0
(2) For every cubic foot of converted timber, the above rates, with an addition of 25 per cent.			
(3) For every thousand bamboos	2	8	0
(4) For every hundred bundles of cane (all varieties) at 76 pieces each (1 anna per bundle)	6	4	0
(5) Thatching-grass—			
(*a*) If brought out on rafts, for every hundred cubic feet (rough outside measurement)	0	4	0
(*b*) If otherwise removed, for every hundred bundles	0	4	0
(6) For every maund of charcoal	0	2	0
(7) For every maund of firewood	0	0	6
(8) *Agar* per basket	1	8	0
(9) Reeds (*ikra* and *nal*) per *galla* or bundle	0	0	6
(10) Leaves (*pati*) per thousand *dals*	0	10	0

Appendix XII.

Rules for protected Forests in the North Cachar Hills.

No. 12.—In exercise of the powers conferred by Section 31 of Act VII. of 1878 (the Indian Forest Act), the Chief Commissioner of Assam is pleased to make, and, with the sanction of the Governor-General in Council, to publish, the following rules, which shall come into force on and from this date.

Infringement of these rules will subject the offender to punishment under Section 32, Clause (*h*) of the Forest Act, which imposes for their breach a penalty of imprisonment for a term which may extend to six months, or of fine, which may extend to Rs. 500, or both.

I.—No timber or other forest produce shall be cut or removed from the protected forests in the North Cachar Hills for the purpose of trade without a license in such form as the Chief Commissioner may from time to time prescribe.

II.—Such trade licenses may be obtained from the officer in charge of the North Cachar Hills sub-division, or any other officer authorised by him in that behalf, and shall be charged for at the following rate:—

Each license for removing timber or any other forest produce during a period not exceeding one year ..... 8 annas.

III.—Before such trade license can be granted, the royalty, as sanctioned for the time being by the Chief Commissioner, and notified in the *Assam Gazette*, must be paid to the officer granting the license.

IV.—Ryots are allowed to supply themselves free of royalty with timber of unreserved trees and other forest produce, exclusively for their own use, without obtaining a license.

V.—All timber and other forest produce passing out of the protected forests in the North Cachar Hills for the purpose of trade may be stopped for examination by any forest or police officer, and all persons in charge of such timber or other forest produce shall be bound to produce any license which may have been granted to them under these rules, when called upon to do so by such forest or police officer.

No. 13.—The Chief Commissioner is pleased to prescribe the following rates of royalty to be paid on trees and other forest produce in the protected forests in the North Cachar Hills in the district of Cachar:—

		Rs.	A.	P.
(1)	For every Sál-tree	10	0	0
(2)	" " other reserved tree	6	0	0
(3)	" " unreserved tree	2	0	0
(4)	" each pole or sapling	0	1	0
(5)	" " boat or dugout, the royalty payable on the tree out of which it is cut.			
(6)	" 100 *jangali* or *kata* bamboos	1	0	0
(7)	" 100 *játi* bamboos	2	0	0
(8)	" 100 *bhaluka* bamboos	3	0	0
(9)	" every 100 bundles of cane of 10 pieces each	0	12	0
(10)	" " maund of charcoal, or for every nine cubic feet, if manufactured in the forests	0	2	0
(11)	" " permit to remove firewood for one month	1	0	0
(12)	" " ditto ditto ditto for one year	9	0	0

Appendix XIII.

Statement showing increase and decrease in Forest produce removed by purchasers in 1883-84 from the forests in the Assam Valley Districts, Gáro, Khási and Jaintia, and Nága Hills, as compared with that removed in the previous year.

Description of forest produce.	Gáro Hills Division.				Goálpára Division.				Kámrup Division.				Darrang and Nowgong Division.				Sibságar Division.				Lakhimpur Division.				Khasi and Jaintia Hills Division.				Nága Hills Division.			
	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.
Reserved Forests.																																
Sál-trees	....	....	..	..	5,415	1,212	..	4,203	3,871	2,769	..	1,102	57	42	..	15	..	..	..	..	....	..	..	..	..	..	.....	..	..	..	..	..
Reserved trees	....	....	..	..	237	425	188	.	233	332	99	..	14	38	24	..	152	65	..	87	....	..	.	..	..	..	.....	..	..	..	..	..
Unreserved trees ..	....	....	..	..	....	32	32		30	24	..	6	89	253	164	..	550	64	..	486	....	..	.	..	..	..	.....	..	..	..	..	..
Total trees ..	....	....	..	..	5,652	1,669	..	3,983	4,134	3,125	..	1,009	160	333	173	..	702	129	..	573	....	..	.	.	..	..	.....	..	..	..	..	..
Poles or saplings ..	....	....	..	..	624	879	255	..	....	....	..	.	.....	.....	....	..	..	..	..	..	....	..	..	..	..	..	.....	..	..	..	..	..
Boats or dugouts ..	....	....	..	..	123	128	5	..	....	....	..	..	.....	.....	....	..	25	..	..	25	....	..	..	..	..	..	.....	..	..	..	..	..
Dead wood	....	....	..	..	4,386	1,054	..	3,332	6,930	9,800	2,870	..	81	40	9	..	1	1	.	..	....	..	..	..	..	..	.....	..	..	..	..	..
Firewood (rafts) ..	....	....	..	..	....	..	..	..	21	61	40	..	.....	.....	....	..	.	..	.	..	....	..	..	..	..	..	.....	..	..	..	..	..
Charcoal (maunds) ..	....	....	.	..	194	90	..	104	7	20	13	..	2,324	1,952	..	372	1,044	..	.	1,044	....	..	..	..	..	..	.....	..	..	..	..	..
Bamboos	....	....	.	..	2,100	6,544	4,444	..	....	152	152	..	1,000	550	.	450	..	..	.	..	....	..	..	..	..	..	.....	..	..	..	..	..
Canes (bundles) ..	....	....	.	..	200	64,633	64,433	.	....	....	..	..	.....	1,990	1,990	..	..	1,900	1,900	..	....	..	..	..	..	..	.....	..	..	..	..	..
Total Reserved Forest .	....	....		..	12,885	10,274	.	2,611	11,064	13,077	2,013	.	1,191	923	..	268	728	130	..	598	....	..	..	..	..	..	.....	..	..	..	..	..
District Forests.																																
Sál-trees	774	391	..	383	....	100	100	..	1,865	1,245	..	620	9	69	60	..	..	..	..	..	....	.	..	..	11	64	53	..	..	..	..	..
Reserved trees	648	404	..	244	....	88	88	..	247	50	..	197	324	421	97	..	314	732	418	.	253	536	283	..	..	..	.....	..	4	2	..	2
Unreserved trees ..	163	194	31	..	....	6	6	..	28	29	6	..	1,316	625	..	691	37	300	263	..	1,007	900	..	107	..	12	12	..	6	..	..	6
Miscellaneous trees ..	....	....	.	..	1	....		1	....	...	..	..	3	.....	..	3	..	..	..		....	..	..	..	..	25	25	..	..	..	..	..
Total trees ..	1,585	989	..	596	1	194	193	..	2,135	1,324	..	811	1,652	1,115	..	537	351	1,032	681	..	1,260	1,436	176	..	11	101	90	..	10	2	..	8
Poles or saplings ..	67	120	53	..	....	....	..	..	....	....	..	..	.....	.....	..	..	..	173	173	..	....	..	..	..	..	..	.....	..	..	..	..	..
Boats or dugouts ..	6	....	..	6	....	....	..	..	....	....	..	..	14	.....	..	14	..	114	114	..	3	43	40	..	..	..	.....	..	..	..	..	..
Dead wood	3,379	2,852	..	527	....	....	..	..	135	50	..	85	72	18	..	54	..	2	2	..	....	..	..	..	..	12,810	12,810	..	..	..	..	..
Charcoal (maunds) ..	....	....	..	.	....	....	..	..	....	4·6	456	..	12,807	6,352	..	6,455	582	2,370	1,788	.	1,014	1,031	17	..	..	..	.....	..	..	..	..	..
Bamboos	....	....	..	..	....	....	..	..	....	800	800	..	.....	933	933	..	700	575	..	125	2,020	4,800	2,780	..	..	..	.....	..	..	..	..	..
Canes (bundles) ..	....	....	..	..	....	....	..	..	....	....	..	..	.....	.....	..	..	..	8,065	8,065	..	....	18,100	18,100	..	..	..	.....	..	..	..	..	..
Grass (ditto)	....	....	..	..	....	....	..	..	....	....	..	..	.....	.....	..	..	..	..	..	..	....	..	..	..	82	58	.....	24	..	..	..	..
Total District Forest ..	5,037	3,961	..	1,076	1	194	193	..	2,270	2,174	..	96	1,738	2,066	328	..	1,051	1,896	845	..	3,283	6,279	2,996	..	11	12,911	12,900	..	10	2	..	8
Grand Total ..	5,037	3,961	..	1,076	12,886	10,468	..	2,418	13,334	15,251	1,917	..	2,929	2,989	60	..	1,779	2,026	247	..	3,283	6,279	2,996	..	11	12,911	12,900	..	10	2	..	8

APPENDIX XIV.

Statement showing increase and decrease in Revenue on Forest Produce collected in 1883-84 in the Valley Districts, Gáro, Khási and Jaintia, and Nága Hills, as compared with that collected in the previous year.

Description of forest produce	Gáro Hills Division.				Goalpára Division.				Kámrúp Division.				Darrang and Nowgong Division.			
	1882-83	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase	Decrease.	1882-83.	1883-84.	Increase.	Decrease.
	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Reserved Forests.																
Sál trees	....	....	....	....	41,645	27,725	....	13,920	37,031	29 745	....	7,286	570	420	....	150
Reserved trees	....	....	....	....	1,498	2,177	679	....	1,080	1,902	822	....	84	228	144	....
Unreserved trees	....	....	....	....	261	52	....	209	1 9	224	95	....	313	606	293	....
Miscellaneous trees	....	....	....	....	60	....	....	60	....	....	....	....	....	....	....	....
Total revenue on trees	....	....	....	....	43 464	29,954	679	14,189	38,240	31,871	917	7,286	967	1,254	437	150
Poles or saplings	....	....	....	....	312	715	403	....	27	....	....	27	....	....	....	....
Boats or dugouts	....	....	....	....	651	1,018	367	....	....	....	....	....	....	....	....	....
Dead wood	....	....	....	....	2,599	640	....	1,959	2,893	5,112	2,219	....	71	70	....	1
Firewood	....	....	....	....	....	....	....	....	5	30	25	....	....	....	....	....
Do. licenses (annual)	....	....	....	....	....	....	....	....	....	....	....	....	....	18	18	....
Charcoal	....	....	....	....	24	12	....	12	1	3	2	....	291	199	....	92
Bamboos	....	....	....	....	42	131	89	....	....	2	2	....	25	6	....	19
Cane	....	....	....	....	4	485	481	....	....	....	....	....	....	14	14	....
Grass	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grazing dues	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
License-fees (exclusive of firewood licenses)	....	....	....	....	....	40	40	....	....	....	....	....	....	....	....	....
Pass fees	....	....	....	....	....	....	....	....	57	1,100	1,043	....	....	39	39	....
Miscellaneous minor produce	....	....	....	....	....	....	....	....	132	218	86	....	....	2	2	....
Lac mahál	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total revenue under II	....	....	....	....	47,096	32,995	2 059	16,160	41,355	38,336	4,294	7,313	1,354	1 602	510	262
District Forests.																
Sál-trees	5,075	2,825	....	2,250	....	590	590	....	18,540	12,450	....	6,090	90	690	600	....
Reserved trees	2,228	2 620	392	....	....	442	442	....	1,458	258	....	1,200	1 944	2,262	318	....
Unreserved trees	182	448	266	....	1	10	9	....	63	110	47	....	2,621	1,269	....	1,352
Miscellaneous trees.	....	....	....	....	....	....	....	....	....	....	....	....	3	....	....	3
Total revenue on trees	7,485	5,893	658	2,250	1	1,042	1,041	....	20,061	12,818	47	7,290	4,658	4,221	918	1,355
Poles or saplings	7	....	....	7	....	....	....	....	17	....	....	17	....	....	....	....
Boats or dugouts	36	....	....	36	....	....	....	....	....	....	....	....	7	....	....	7
Ditto *ad valorem* duty of ten per cent	202	535	333	....	....	....	....	....	....	....	....	....	....	....	....	....
Timber on land allotted for cultivation	....	....	....	....	....	....	....	....	120	716	596	....	1,516	3,545	2,029	....
Dead wood	2,464	2 995	531	....	....	....	....	....	57	20	....	37	27	19	....	8
Firewood	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Do. licenses (monthly)	....	....	....	....	....	....	....	....	17	50	33	....	....	11	11	....
Do. do. (annual)	....	....	....	....	....	....	....	....	....	....	....	....	....	18	18	....
Charcoal	....	....	....	....	....	....	....	....	....	57	57	....	1,601	794	....	807
Bamboos	5	....	....	5	....	....	....	....	....	11	11	....	....	13	13	....
Cane	....	....	....	....	....	....	....	....	....	....	....	....	6	4	....	2
Reeds	....	....	....	....	....	....	....	....	....	....	....	....	40	....	....	40
Grass	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grazing dues	23	74	51	....	....	....	....	....	....	....	....	....	....	....	....	....
Gurhati licenses	6,103	5,658	....	445	....	....	....	....	....	....	....	....	....	....	....	....
Rubber	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Rubber mahál	....	....	....	....	330	....	....	330	1,610	905	....	705	23,245	22,395	....	850
License fees, exclusive of firewood licenses	....	....	....	....	....	....	....	....	....	....	....	....	....	15	15	....
Pass fees	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lac mahál	....	....	....	....	8	8	....	....	6	9	3	....	200	45	....	155
Miscellaneous minor produce	100	3	....	97	6	39	33	....	58	123	65	....	....	....	....	....
Total revenue under II.	16,425	15,158	1,573	2,840	345	1,089	1,074	330	21,946	14,709	812	8,049	31,300	31,080	3,004	3,224
Grand Total	16,425	15,158	1,573	2,840	47,441	34,084	3,133	16,490	63,301	53,045	5,106	15,362	32,654	32,682	3,514	3,486

APPENDIX XIV.—(*Continued.*)

Description of forest produce.	Sibságar Division.				Lakhimpur Division.				Khási and Jaintia Hills Division.				Naga Hills Division.			
	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
Reserved Forests.																
Sál trees	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Reserved trees	696	414	.....	282	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Unreserved trees	1,068	178	.....	890	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Miscellaneous trees	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Total revenue on trees	1,764	592	.....	1,172	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Poles or saplings	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Boats or dugouts	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Dead wood	10	.....	.....	10	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Firewood	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Do. licenses (annual)	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Charcoal	63	79	16	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Cane	8	15	7	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Grass	85	180	95	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Grazing dues	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
License-fees (exclusive of firewood licenses)	4	3	.....	1	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Pass fees	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Miscellaneous minor produce	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Lac mahál	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Total revenue under II.	1,934	869	118	1,183	.....	.....	.....	.....	....	....	....	....	....	....	....	....
District Forests.																
Sál-trees	.....	.....	.....	.....	.....	.....	.....	.....	110	640	530	....	....	....	....	....
Reserved trees	2,270	4,683	2,413	.....	1,518	3,052	1,534	.....	....	....	....	....	24	12	....	12
Unreserved trees	87	520	433	.....	2,050	1,819	.....	231	....	24	24	....	16	....	....	16
Miscellaneous trees	.....	.....	.....	.....	.....	.....	.....	.....	....	12	12	....	....	....	....	....
Total revenue on trees	2,357	5,203	2,846	.....	3,568	4,871	1,534	231	110	676	566	....	40	12	....	28
Poles or saplings	.....	8	8	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Boats or dugouts	.....	.....	.....	.....	18	138	120	.....	....	....	....	....	....	....	....	....
Ditto *ad valorem* duty of ten per cent.	150	.....	.....	150	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Timber on land allotted for cultivation	3,547	917	.....	2,630	2,930	2,924	.....	6	....	....	....	....	....	....	....	....
Dead wood	.....	6	6	.....	.....	.....	.....	.....	929	948	19	....	....	....	....	....
Firewood	111	332	221	.....	.....	.....	.....	.....	231	....	....	231	....	....	....	....
Do. licenses (monthly)	.....	.....	.....	.....	157	156	.....	1	....	....	....	....	....	....	....	....
Do. do. (annual)	.....	.....	.....	.....	.....	396	396	.....	....	....	....	....	....	....	....	....
Charcoal	78	166	88	.....	127	130	3	.....	....	....	....	....	....	....	....	....
Bamboos	17	15	.....	2	46	83	37	.....	....	....	....	....	....	....	....	....
Cane	.....	60	60	.....	.....	36	36	.....	....	....	....	....	....	....	....	....
Reeds	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Grass	.....	.....	.....	.....	.....	.....	.....	.....	5	4	....	1	....	....	....	....
Grazing dues	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Garkati licenses	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Rubber	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Do. mahals	.....	.....	.....	.....	13,987	6,888	.....	7,099	600	600	....	....	1,200	800	....	400
License-fees, exclusive of firewood licenses	.....	50	50	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Pass fees	.....	.....	.....	.....	208	.....	.....	208	....	....	....	....	....	....	....	....
Lac mahals	6	.....	.....	6	.....	.....	.....	.....	....	....	....	....	....	....	....	....
Miscellaneous minor produce	202	.....	.....	202	.....	.....	.....	.....	....	180	180	....	....	....	....	....
Total revenue under II.	6,468	6,737	3,279	2,990	20,991	15,572	2,126	7,545	1,875	2,408	765	232	1,240	812	....	428
Grand Total	8,402	7,626	3,397	4,173	20,991	15,572	2,126	7,545	1,875	2,408	765	232	1,240	812	....	428

Appendix XV.

Statement showing licenses granted during each month in the year for cutting timber and other forest produce and for elephants to drag timber in 1883-84, as compared with the previous year.

Months.	Licenses for cutting timber, &c.				Licenses for cutting timber, &c., for home consumption.				Licenses for elephants to drag timber.			
	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.
April	120	231	111	...	...	...	...	...	3	8	5	...
May	77	53	...	24	...	6	6	...	7	7	...	...
June	18	163	145	...	...	...	...	...	1	20	19	...
July	301	359	58	...	...	...	...	...	18	13	...	5
August	137	79	...	58	...	...	...	...	3	5	2	...
September	282	27	...	255	...	12	12	...	2	6	4	...
October	419	531	112	...	...	11	11	...	4	26	22	...
November	77	233	156	...	...	6	6	...	3	12	9	...
December	14	88	74	...	...	...	...	...	3	6	3	...
January	297	41	...	256	...	6	6	...	14	1	...	13
February	173	132	...	41	...	13	13	...	11	11	...	...
March	204	26	...	178	...	2	2	...	8	4	...	4
Total ...	2,119	1,963	656	812	...	56	56	...	77	119	64	22

Licenses granted in each reserve and district forest for cutting timber and other forest produce and for elephants to drag timber in 1883-84, as compared with the previous year.

Names.	Licenses for cutting timber, &c.				Licenses for cutting timber, &c., for home consumption.				Licenses for elephants to drag timber.			
	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.
I. Upper Jiri Reserve ...	249	165	...	84	...	...	...	...	2	7	5	...
II. Lower Jiri ditto ...	89	125	36	...	...	5	5	...	1	8	7	...
III. Barak ditto ...	243	297	54	...	...	3	3	...	6	16	10	...
IV. Sonai ditto ...	126	64	...	62	...	...	...	...	11	4	...	7
V. Katakhal ditto ...	107	58	...	49	...	...	...	...	3	3	...	...
VI. Dhaleswari ditto ...	179	166	...	13	...	...	...	...	11	15	4	...
VII. Inner Line ditto ...	682	582	...	100	...	...	...	...	17	25	8	...
District forests ..	444	506	62	...	...	48	48	...	26	41	15	...
Total ...	2,119	1,963	152	308	...	56	56	...	77	119	49	7

Appendix XVI.

STATEMENTS SHOWING THE FOREST PRODUCE REMOVED BY PURCHASERS AND REVENUE REALISED THEREON IN THE CACHAR AND SYLHET DIVISIONS, DURING THE YEAR 1883-84.

Forest produce exported from, and remaining in, the district of Cachar at the close of the year 1883-84.

MATIJURI AND SIYALTEK.

Description of forest produce.	Quantity of forest produce which passed Matijuri revenue station.			Quantity of forest produce which had passed Matijuri and was again checked at Siyaltek revenue station			Amount of forest produce which remained in the district of Cachar at the close of the year.		
	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests	Total.
Logs	758	7,405	8,163	609	6,644	7,253	149	761	910
Posts and planks	.....	451	451	.....	279	279	.....	172	172
Agar wood	4	77	81	4	77	81	.....	.....	....
Tea-boxes	.....	.....	....	.....	.....	....	.....	.....	....
Bamboos	114,000	11,818	125,818	101,150	11,970	113,120	12 850	.....	....
Canes	3,331	10,192	13,523	3,169	9,646	12,815	162	546	708
Grass and reeds	8,450	1,710	10,160	.....	1,710	1,710	8,450	.....	8,450
Charcoal	.....	.....	....	.....	.....	....	.....	.....	....
Firewood	.....	185	185	.....	185	185	.....	.....	....

Forest produce exported from, and remaining in, the District of Cachar at the close of the year 1883 84

SILCHAR AND SIYALTEK.

Description of forest produce.	Quantity of forest produce which passed Silchar revenue station.			Quantity of forest produce which had passed Silchar and was again checked at Siyaltek revenue station.			Amount of forest produce whic remained in the district of Cacha at the close of the year.		
	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total
Logs	6,006	11,470	17,476	2,034	6,474	8,508	3,972	4,996	8,968
Posts and planks	.....	273	273	.....	203	203	.....	70	70
Agar-wood	8	.....	8	8	.....	8	.....	.....	....
Tea-boxes	.....	.....	....	.....	.....	....	.....	.....	....
Bamboos	617,826	87,370	705,196	369,470	24,020	393,490	2,48,356	63,350	311,70
Canes	11,666	2,989	14,655	8,507	3,068	11,575	3,159	.....	3,11
Grass and reeds	18,850	1,204,904	1,223,754	18,850	1,099,203	1,117,753	.....	105,701	105,701
Charcoal	.....	1,153	1,153	.....	.....	....	.....	1,153	1,153
Firewood	3,528	5,574	9,102	.....	199	199	3,528	5,375	8,903

Forest produce passed at the different Revenue Stations during each month in 1883-84.

SIYALTEK.

Months	Logs	Agar.	Posts and planks.	Tea-boxes.	Bamboos.	Canes	Grass and reeds.	Charcoal in maunds.	Firewood in maunds.	Amount realised
										Rs. A. P.
April 1883	27	....	....	....	250	....	58,204	....	....	8 8 0
May "	26	....	12	....	2,100	20	15,000	....	....	79 1 6
June "	201	....	....	....	9,200	....	16,417	....	....	40 2 0
July "	151	....	....	....	6,125	140	59,944	....	....	85 9 6
August "	19	....	....	....	9,000	71	3,664	....	20	45 1 0
September "	163	....	....	....	31,500	120	5,542	....	....	308 0 0
October "	203	....	18	....	85,130	88	27,031	....	40	346 13 0
November "	421	....	....	....	35,580	61	155,017	....	6	488 11 6
December "	31	....	....	....	10,600	....	46,910	....	....	16 14 0
January 1884	201	....	20	....	1,850	....	13,594	....	....	155 10 6
February "	51	....	....	....	5,800	172	40,549	....	....	254 3 0
March "	221	....	2	....	19,300	....	18,973	....	....	71 8 3
Total	1,715	....	60	....	216,435	672	440,935	....	65	1,900 2 3

SILCHAR.

Months.	Logs.	Agar.	Posts and planks	Tea-boxes	Bamboos.	Canes.	Grass and reeds	Charcoal in maunds.	Firewood in maunds	Amount realised
										Rs. A. P.
April 1883	880	.....	33	.....	39,668	1,402	30,949	17	942	863 15 6
May "	779	8	49	.....	53,250	204	158,811	41	335	738 13 6
June "	2,818	.....	83	.....	32,660	1,910	3,470	.....	385	2,250 3 0
July "	1,261	.....	.....	.....	56,375	1,292	.....	95	379	1,560 7 0
August "	806	.....	.....	.....	41,600	811	.....	.....	250	1,031 7 0
September "	1,548	.....	.....	.....	34,800	985	.....	.....	549	1,559 10 3
October "	2,021	.....	.....	.....	29,450	1,708	30,400	.....	724	3,098 4 0
November "	2,210	.....	.....	.....	117,660	2,242	7,876	.....	1,604	3,294 6 6
December "	1,581	.....	63	.....	97,025	883	12,500	.....	1,032	1,619 11 0
January 1884	1,774	.....	.....	.....	74,900	635	4,76,490	.....	1,045	2,014 5 6
February "	1,029	.....	.....	.....	60,370	1,204	246,742	.....	1,132	746 3 0
March "	769	.....	45	.....	67,438	1,379	256,516	1,000	725	1,248 12 0
Total.....	17,476	8	273	.....	705,196	14,655	1,223,754	1,153	9,102	20,026 2 3

MATIJURI.

Months.	Logs.	Agar	Posts and planks.	Tea-boxes	Bamboos.	Canes.	Grass and reeds.	Charcoal in maunds.	Firewood in maunds.	Amount realised.
										Rs A. P.
April 1883	828	37	.....	.....	12,550	1,568	.....	.....	.....	50 6 0
May "	172	.....	8	.....	5,100	1,625	.....	.....	.....	58 1 0
June "	1,437	.....	50	.....	13,100	1,223	.....	.....	.....	684 0 0
July "	943	.....	.....	.....	13,000	664	5,400	.....	.....	547 11 0
August "	334	.....	.....	.....	8,850	315	.....	.....	40	14 12 0
September "	631	.....	.....	.....	6 900	121	.....	.....	.....	613 11 0
October "	1,586	.....	131	.....	12,813	534	.....	.....	20	186 2 0
November "	1,324	4	.....	.....	34,450	1,642	.....	.....	100	553 8 0
December "	902	.....	50	.....	10,930	1,324	.....	.....	25	209 14 0
January 1884	282	.....	.....	.....	200	463	.....	.....	.....	172 2 0
February "	96	.....	49	.....	6,220	2,040	1,710	.....	.....	33 7 0
March "	128	40	163	.....	1,700	2,004	3,050	.....	.....	220 0 0
Total.....	8,163	81	451	.....	126,813	13,523	10,160	.....	185	3,470 10 0

Statement showing the Forest Produce removed from Government, Foreign, and Private Forests in the Cachar Division in the year 1883-84.

Revenue station.	Locality	Logs.			Agar		Posts and planks.			Tea-boxes.		Bamboos.		Canes		Sun-grass and reeds.		Charcoal.		Firewood.	
		No.	C. ft.	Amount.	No.	Amount.	No.	C. ft.	Amount.	No.	Amount	No.	Amount.	No.	Amount.	C. ft.	Amount.	No. of Mds.	Amount.	No. of Mds.	Amount.
				Rs. A. P.		Rs. A. P.			Rs. A. P.				Rs. A. P.		Rs. A. P.		Rs. A. P.				Rs. A. P.
Silchar.	Government — Reserved	9	553	35 9 0	..	.....	..	....	.....	..	.....	.....	.....	60	4 4 0	....	.....	..	.....	..	.....
	Government — District Forests	616	11,328	1,495 9 3	..	.....	33	92	12 15 0	..	.....	99,400	282 8 0	551	37 7 0	9,246	31 14 0	..	.....	..	.....
	Total	625	11,881	1,531 2 3	..	.....	33	92	12 15 0	..	.....	99,400	282 8 0	611	41 11 0	9,246	31 14 0	..	.....	..	.....
	Foreign	....	.....	.....	..	.....	..	...	.....	..	.....	....	.....	...	...	....	.....	..	.....	..	.....
	Private	1,090	31,295	.....	..	.....	17	12	.....	..	.....	117,035	.....	61	....	431,689	.....	..	.....	65	.....
	Total	1,715	43,176	1,531 2 3	..	.....	50	104	12 15 0	..	.....	216,435	282 8 0	672	41 11 0	440,935	31 14 0	..	.....	65	.....
	Government — Reserved	4,133	143,768	10,489 3 0	..	.....	..	....	.....	..	.....	341,400	1,017 8 0	7,264	482 0 0	....	.....	..	.....	2,751	102 15 9
	Government — District Forests	757	29,621	3,822 15 0	8	13 0 0	..	....	.....	..	.....	50,900	168 4 0	3,052	216 10 0	18,750	47 14 0	..	.....	663	24 11 6
	Total	4,890	173,389	14,312 2 0	8	13 0 0	..	....	.....	..	.....	392,300	1,185 12 0	10,346	698 10 0	18,750	47 14 0	..	.....	3,414	127 11 3
	Foreign	1,116	39,445	2,963 2 0	..	.....	..	....	.....	..	.....	225,526	590 13 0	1,320	83 8 0	100	0 1 0	..	.....	114	3 9 0
	Private	11,470	222,219	.....	..	.....	273	498	.....	..	.....	87,370	....	2,989	....	1,204,904	.....	1,153	.....	5,574	.....
	Total	17,476	435,053	17,275 4 0	8	13 0 0	273	498	.....	..	.....	705,196	1,776 9 0	14,655	782 2 0	1,223,754	47 15 0	1,153	.....	9,102	131 4 3
Matijuri.	Government — Reserved	643	28,385	2,230 13 0	..	.....	..	....	.....	..	.....	35,900	144 12 0	3,041	205 1 0	....	.....	..	.....	..	.....
	Government — District Forests	115	2,949	579 4 0	4	7 0 0	..	....	.....	..	.....	.....	.....	290	21 2 0	8,450	21 6 0	..	.....	..	.....
	Total	758	31,334	2,810 1 0	4	7 0 0	..	....	.....	..	.....	35,900	144 12 0	3,331	226 3 0	8,450	21 6 0	..	.....	..	.....
	Foreign	....	.....	.....	..	.....	..	....	.....	..	.....	78,100	261 4 0	....	....	....	.....	..	.....	..	.....
	Private	7,405	155,215	.....	77	.....	451	657	.....	..	.....	11,813	.....	10,192	....	1,710	.....	..	.....	185	.....
	Total	8,163	186,549	2,810 1 0	81	7 0 0	451	657	.....	..	.....	125,813	406 0 0	13,523	226 3 0	10,160	21 6 0	..	.....	185	.....

Statement showing the increase and decrease of forest produce removed from the Government Foreign and private forests in the Cachar Division during 1883-84 as compared with 1882-83.

Description of forest produce.	Government forests.				Foreign forests.				Private forests.			
	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.
Logs	1,472	6,273	4,801	.....	212	1,116	904	.....	21,241	19,965	.....	1,276
Agar	1,437	12	.....	1,425	.....	.....	.....	.....	1	77	76	.....
Posts and planks	67	33	.....	34	.....	.....	.....	.....	793	741	.....	52
Tea-boxes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos	685,402	527,600	.....	157,802	240,920	303,626	62,706	.....	262,047	216,218	.....	45,829
Canes in bundles	20,715	14,288	.....	6,427	60	1,320	1,260	.....	10,956	13,242	2,286	.....
Grass and reeds c. ft.	6 rafts.	36,446	6,446	.....	.....	100	100	.....	1,253	1,638,303	1,637,050	.....
Charcoal	.....	.....	.....	.....	.....	.....	.....	.....	1,292	1,153	.....	139
Firewood	4,396	3,414	.....	982	.....	114	114	.....	17,636	5,824	.....	11,812

* One raft is reckoned at 5,000 cubic feet.

Statement showing the increase and decrease in revenue on Forest Produce removed during 1883-84, as compared with 1882-83, at the different Forest Revenue Stations, Cachar.

Description of forest produce	Siyaltek.				Silchar.				Matijuri.				Amount of revenue.			
	1882-83.	1883-84.	Increase	Decrease.	1882-83.	1883-84.	Increase.	Decrease	1882-83.	1883-84.	Increase	Decrease.	1882-83	1883-84.	Increase.	Decrease.
	Rs. As. P.	Rs As. P.	Rs As. P	Rs. As P	Rs As. P.	Rs As. P	Rs. As P.	Rs. As. P.	Rs. As. P.	Rs. As P	Rs. As P.	Rs. As. P.	Rs. As. P	Rs. As. P.	Rs As P	Rs. As. P
Logs	2,128 4 0	1,531 2 3	.....	592 1 9	6,018 11 0	17,275 4 0	11,256 9 0	.....	3,144 2 0	2,810 1 0	.....	334 1 0	11,286 1 0	21,616 7 3	10,330 6 3	.....
Agar	.....	.....	.....	.....	229 12 0	13 0 0	.....	216 12 0	8 8 0	7 0 0	.....	1 8 0	238 4 0	20 0 0	218 4 0	.....
Posts and planks	.....	12 15 0	12 15 0	.....	53 3 0	.....	.....	53 3 0	.....	.....	.....	.....	53 3 0	12 15 0	.....	40 4 0
Tea boxes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos	288 5 0	282 8 0	.....	5 13 0	1,903 15 0	1,776 9 0	.....	127 6 0	495 9 0	406 0 0	.....	89 9 0	2,687 13 0	2,465 1 0	.....	222 12 0
Canes	38 10 0	41 11 0	3 1 0	.....	663 13 6	782 2 0	118 4 6	.....	105 1 6	226 [illegible] 0	121 1 6	.....	807 9 0	1,050 0 0	242 7 0	.....
Reeds and grass	2 12 0	31 14 0	29 2 0	.....	17 10 0	47 15 0	30 5 0	.....	4 12 0	21 0 0	16 10 0	.....	25 2 0	101 3 0	76 1 0	.....
Charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Firewood	3 0 6	.....	.....	3 0 6	176 9 9	131 4 3	.....	45 5 6	.....	.....	.....	.....	179 10 3	131 4 3	.....	48 6 0
Amount of revenue collected ..	2,455 15 6	1,900 2 3	45 2 0	600 15 3	9,063 10 3	20,026 2 3	11,405 2 6	442 10 6	3,758 0 6	3,470 10 0	137 11 6	425 2 0	15,277 10 3	25,396 14 6	10,867 2 3	511 6 0

Forest produce which was removed from the North Cachar Hills, and registered at the Diyangmukh police outpost, during each month in the year 1883-84.

Months.	Dugouts.		Posts.		Oars.		Planks.	
	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.
		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.
April 1883	12	281 0 0	10	7 8 0	.....	.....	3	0 15 0
May "	28	1,181 8 0	138	273 14 0	20	37 12 0	6	2 1 0
June "	30	1,195 11 0	35	26 0 0	7	19 0 0	.....	.....
July "	23	240 12 0	72	21 10 0	.....	.....	31	8 8 0
August "	21	407 0 0	125	138 0 0	35	21 6 0	54	24 2 0
September "	23	468 0 0	61	36 0 0	13	26 0 0	45	17 9 0
October "	1	20 0 0	18	24 12 0	.....	.....	.....	.....
November "	17	589 4 0	37	93 0 0	.....	.....	.....	.....
December "	6	142 0 0	40	80 0 0	.....	.....	9	2 7 0
January 1884	19	546 8 0	18	16 0 0	.....	.....	.....	.....
February "	11	482 8 0	8	32 4 0	1	2 0 0	4	1 0 0
March "	4	176 0 0	45	53 2 0	4	2 8 0	146	72 6 0
Total	195	5,730 3 0	607	802 2 0	80	108 10 0	298	129 0 0

H. G. YOUNG,
Assistant Conservator of Forests, Cachar Division.

FOREST DEPARTMENT, ASSAM, SYLHET DIVISION.—FOREST PRODUCE PASSED AT THE DIFFERENT REVENUE STATIONS DURING EACH MONTH IN 1883-84.

LANGAI.

Months.	Logs.	Agar.	Posts and planks.	Tea-boxes.	Bamboos.	Canes.	Grass and reeds.	Charcoal in maunds.	Firewood in maunds.	Amount realised.
						Bundles.				Rs. A. P.
April 1883	11	...	...	...	24,655	132	2,408	...	...	111 1 3
May "	13	...	...	...	50,250	94	3,075	...	...	147 14 0
June "	1	...	16	...	48,225	143	4,012	...	...	161 5 0
July "	3	...	16	...	61,625	188	...	...	...	199 13 6
August "	118	...	28	...	31,900	3	...	...	...	435 3 9
September "	109	...	28	...	30,325	3	...	...	...	535 5 0
October "	59	...	4	...	39,000	427	...	...	...	223 10 6
November "	1	...	...	...	27,100	867	5	...	50	125 5 6
December "	32	...	...	...	5,250	37	...	...	...	75 7 0
January 1884	...	...	...	...	3,700	123	9,200	...	...	39 15 0
February "	...	...	...	...	18,400	291	29,800	...	...	138 11 0
March "	...	...	...	...	15,825	335	8,770	...	...	85 14 0
Total	347	...	92	...	356,255	2,643	57,270	...	50	2,279 9 6

SINGLA.

										Rs. A. P.
April 1883	117	...	...	...	...	...	72	...	...	74 5 0
May "	...	...	...	...	...	...	...	...	...	...
June "	...	...	...	...	1,800	...	...	...	...	4 8 0
July "	47	...	...	...	...	...	280	...	...	97 8 0
August "	...	...	...	...	...	...	...	...	...	...
September "	...	...	...	...	...	...	...	...	...	...
October "	3	...	...	...	...	...	...	...	...	19 8 0
November "	22	...	...	...	...	280	561	...	...	125 12 6
December "	...	...	...	...	...	...	...	...	...	...
January 1884	...	...	...	...	...	...	...	...	...	...
February "	...	...	...	...	...	...	1,000	...	...	2 8 0
March "	7	...	48	...	...	...	1,000	...	...	54 10 0
Total	196	...	48	...	1,800	280	2,913	...	...	378 11 6

FOREST DEPARTMENT, ASSAM, SYLHET DIVISION.

Forest Produce removed from Government, Foreign, and Private Forests in the year 1883-84.

Revenue station.	Locality.	Logs.			Agar.			Posts and planks.			Tea-boxes		Bamboos.		Canes		Reeds and grass		Charcoal.		Firewood.		REMARKS.
		Number	Cubic feet.	Amount	Number	Cubic feet.	Amount	Number	Cubic feet.	Amount	Number.	Amount	Number	Amount.	Number	Amount	Cubic feet.	Amount.	Maunds	Amount.	Maunds	Amount.	
				Rs As P						Rs As P.		Rs		Rs. As. P.		Rs. As P		Rs As. P		Rs.		Rs. As. P.	
Langai	Government	347	6,268	903 14 9				92	1,269	136 14 0			356,255	905 9 3	2,643	165 3 0	57,270	166 4 6			50	1 12 0	
	Foreign																						
	Private																						
	Total	347	6,268	903 14 9				92	1,269	136 14 0			356,255	905 9 3	2,643	165 3 0	57,270	166 4 6			50	1 12 0	
Singla	Government	196	2,614	323 3 0				†48					1,800	4 8 0	280	17 8 0	2,913	33 8 6					
	Foreign																						
	Private																						
	Total	196	2,614	323 3 0				48					1,800	4 8 0	280	17 8 0	2,913	33 8 6					

* Number is stated in this.
† Royalty is included in (Rs 323-3) shown under head "logs" as the amount cannot be shown separately, being included in another item, so the amount is included in the above amount.

Increase and decrease in Revenue from Forest Produce removed during 1883-84, as compared with the previous year (from the Sylhet Government, foreign, and private forests).

Description of forest produce.	Government forests.				Foreign forests.				Private forests.			
	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.								
Logs	2,014 12 4	1,227 1 9	.....	787 10 7	.....	.....	.....	.....	.....	.....	.....	
Agar	34 4 0	.....	.....	34 4 0	.....	.....	.....	.....	.....	.....	.....	.....
Posts and planks	127 4 1	136 14 0	9 12 11	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tea-boxes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos	1,099 11 3	910 1 3	.....	189 10 0	.....	.....	.....	.....	.....	.....	.....	.....
Canes (in bundles)	416 14 0	182 11 0	.....	234 3 0	.....	.....	.....	.....	.....	.....	.....	.....
Grass and reeds (in rafts)	314 12 6	199 13 0	.....	114 15 6	.....	.....	.....	.....	.....	.....	.....	.....
Charcoal and firewood (in maunds)	1 0 0	1 12 0	0 12 0	.....	.....	.....	.....	.....	.....	.....	.....	.....

FOREST DEPARTMENT, ASSAM, SYLHET DIVISION.

Quantities of and Revenue on Forest Produce at the different Forest Revenue Stations.

Description of forest produce.	Langai.				Singla.				Amount of Revenue.			
	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.	1882-83.	1883-84.	Increase.	Decrease.
									Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Logs	1,442	347	.....	1,095	362	196	.....	166	2,014 12 4	1,227 1 9	.....	787 10 7
Agar	21	.....	.....	21	30	.....	.....	30	34 4 0	.....	.....	34 4 0
Posts and planks	127	92	.....	35	.....	48	48	.....	127 1 1	136 14 0	9 12 11	.....
Tea-boxes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos	433,744	356,255	.....	77,489	4,850	1,800	.....	3,050	1,099 11 3	910 1 3	.....	189 10 0
Canes	5,142	2,643	.....	2,499	1,021	280	.....	741	416 14 0	182 11 0	.....	234 3 0
Reeds and grass	189,092	57,270	.....	131,822	1,250	2,913	1,663	.....	314 12 6	199 13 0	.....	114 15 6
Charcoal	8 Mds.	.....	.....	8 Mds.	.....	.....	.....	.....	1 0 0	.....	.....	1 0 0
Firewood	.....	50 Mds.	50 Mds.	.....	.....	.....	.....	.....	.....	1 12 0	1 12 0	.....
Amount of revenue collected	.....	.....	.....	.....	.....	.....	.....	.....	4,008 7 7	2,658 5 0	11 8 11	1,361 11 3

C. N. NANDI,
for *Deputy-Commissioner, Sylhet.*

Resolution on the Assam Forest Report for 1883-84.

Extract from the Proceedings of the Chief Commissioner of Assam in the Revenue Department, No. 2,371, dated Shillong, the 26th September 1884.

READ—

The Report of Forest Administration in Assam for the year 1883-84.

RESOLUTION.

Date of submission

The Forest Report is due on the 1st August. It was completed by Mr. Mann before he went on leave on the 24th June, but pressure of work in the Secretariat Press delayed its printing till the 20th August. Mr. Mann was in charge of the department throughout the year.

Total area of forests.

2. The area of reserved and protected forests continues gradually to increase, while the area of district forests has been diminished by the transfer of lands from this class to the other two classes. The general result, as shown in the subjoined table, is an addition of 337 square miles to the area administered under the Forest Act:—

	Area in square miles.		
	31st March 1883.	Added or removed in 1883-84.	31st March 1884.
Reserved forests (Forest Act, Chapter II)	2,177	+137	2,314
Protected forests (Forest Act, Chapter IV.)....	662	+200	862
District forests	6,766	−344	6,422
Total	9,605	—7	9,598

Reserved forests

3. Reserved forests now exist in every district, except Lakhimpur and Sylhet. In both these districts there are tracts proper for reservation, and in Sylhet the Langai and Singla forest, covering an area of about 170 square miles, has actually been notified under Section 4 of the Act, but further steps are deferred, pending the settlement of the claims of the neighbouring landholders; it is to be hoped that these will be disposed of in the ensuing cold season. A large area in Lakhimpur has been selected for reservation, but on this point proposals are awaited from the Conservator's office. The extent of reserved forests in the rest of the Province is as follows :—

District.	Reserved forests.	
	31st March 1883. Square miles.	31st March 1884. Square miles.
Gáro Hills	.....	79
Goalpára	437	455
Kamrúp.....	122	122
Darrang.....	274	274
Nowgong	8	8
Sibságar.....	54	94
Nága Hills.....	487	487
Khási and Jaintia Hills	50	50
Cachar	745	745
Total.....	2,177	2,314

The year 1883-84 was the first in which a beginning was made towards reserving the valuable forests in the Gáro Hills, and the area reserved would have been about 60 square miles larger had not proceedings been suspended during Captain Maxwell's absence from his district, while accompanying the Aka Expedition as Political Officer. The additions made in Goálpára consisted of the Sidli forests of Bengtol, Darogáon, and Bhumeswar Hill; the latter contained a little *jhúming* cultivation of cotton within its area of five square miles, for which compensation was given. In Kámrúp, the small *sál* forest on the Hájo Hill, covering about one-third of a square mile, was reserved, but the Khádim of the

Páo Mecca mosque, which crowns the hill, is to have three acres around the mosque assigned for his use, and permission to take forest produce for the use of the mosque and pilgrims, under certain conditions. Two reserves, extending over about 40 square miles, were taken up in Sibságar, but no further steps are being taken to enforce conservancy rules for the present. An addition of nine square miles to the Charduar reserve in Darrang was proposed during the year, and has been made in 1884-85; and the Bijni forests, in Goálpára, estimated at 192 square miles, were demarcated in the latter part of the cold season, but the southern boundary line will have to be revised by the Deputy-Commissioner, who has hitherto been unable to visit the locality, before it can be finally adopted. The object is to exclude all cultivation, and not to take up any lands that the inhabitants of the neighbouring villages have been in the habit of resorting to for fluctuating cultivation, at least within the last five or six years. Generally speaking, Mr. Elliott looks with jealousy on the extension of reserves in the vicinity of settled country, and on the curtailment of any reasonable privileges enjoyed by tribes who depend for their livelihood on *jhúm* cultivation. No gain to the Forest Department can counterbalance the evil of encroachment on the rights of the people to make a reasonable use of waste lands, and, in fact, it can seldom be the interest of the department to set itself in antagonism to the wishes of the communities who surround the forests, and on whose good feeling forest officers have principally to depend for the observance of forest laws.

Protected forests. District forests.

4. By far the largest area both of protected and of district forests is in Lakhimpur, but it will probably be reduced by the transfer of some portion from the protected to the reserved class during the current year. About 200 square miles of district forests in North Cachar have been made protected forests; some of these tracts include cultivation, which has not been interfered with, and the people are free to make use of all land which has been *jhúmed* in former years; it is only *jhúming* in virgin forest that is prohibited. With these exceptions, the area of protected and of district forests underwent little change, and stood as follows at the close of the year:—

District.	Area in square miles. Protected forests.	District forests.
Goálpára	.....	222
Kámrúp	3	504
Darrang	.....	202
Nowgong	.....	347
Sibságar	30	365
Lakhimpur	459	3,532
Garo Hills	.....	271
Khási and Jaintia Hills	.....	100
Nága Hills	.....	493
Sylhet	170	78
Cachar	200	308
Total	862	6,422

The forests in the Májuli island were inspected for the first time this year. Their area is estimated at about 80 square miles, but the timber is not of a very valuable description, and the forests are extensively *jhúmed* by Miris, who cultivate mustard and early rice. Proposals regarding them are to be submitted during the current year.

Clearing and inspection of boundaries

5. Monthly returns of the progress made in clearing and inspecting the boundaries of reserved and protected forests are now submitted to the Conservator by forest officers. The following figures show that much more was done in this way during 1883-84 than in the previous year:—

Forest division.	Total length of boundaries (1883-84)	Length inspected by forest officers. 1882-83.	1883-84.	Length cleared, 1883-84.
	Miles.	Miles.	Miles.	Miles.
Gáro Hills	117	28	67	80
Goálpára	99	54	80	86
Kámrúp	252	98	234	252
Darrang and Nowgong	55	51	55	55
Sibságar and Nága Hills	125	25	70	108
Lakhimpur	110	...	42	108
Cachar	69	33	12	68
Sylhet	6	...	...	...

Inspection work has been very well done in Kámrúp and Darrang, but the forest officers of Lakhimpur and Cachar have been remiss, and must show a better tale of work next year. The clearing of boundaries ought to be completely done every year, as a regular thing: it has been well attended to, on the whole, in 1883-84 except in the Gáro Hills, where the boundaries of the Rongrengiri forest were left uncleared; the Gáros, it is said, were engaged in building the Rongrengiri outpost till the season for cultivation began, when their labour was required in their own fields. In the plains districts, boundary clearing can probably be done better by contract than in any other way; this system has been ound successful in Sibságar, and has been partly tried in Lakhimpur; it should be adopted everywhere as far as possible. The repair of boundary-marks accompanies the clearing of boundaries; in Darrang, Cachar, and Lakhimpur all the boundary-marks were repaired during the year, but in the Gáro Hills only 152 out of 216, and in Sibságar 192 out of 249. This work also should be regularly and completely done every year; it is necessary to repair not only weather damages, but also the injury done by wild elephants, who, as Mr. Mann says, "make the posts and mounds the objects of their frenzy."

Surveys

6. Forest surveys are conducted in rather piecemeal fashion, but they are gradually giving us maps, on the scale of 4 inches to the mile, of the reserves and protected forests in each division. The additions made to these maps during the year were 23 square miles in the Goálpára division, 47 in Kámrúp, 8 in Nowgong, 48 in Lakhimpur, and about 3 square miles in Cachar. The Sibságar division was without a surveyor during the working season, and the Gáro Hills surveys were concerned chiefly with timber depôts. The largest single block surveyed anywhere was part of the Pantan reserve, in Kámrúp, with an area of 19 square miles.

Measures of protection.

7. Prosecutions under the Forest Act have steadily increased in number during the last three years: they were 37 in 1881-82, 50 in 1882-83, and 86 in 1883-84; the number of persons tried in 1883-84, however, was only 152, against 206 in the previous year; 100 of these were convicted. Out of these 86 cases, 69 were cases of unauthorised appropriation of forest produce, and 35 occurred in the Lakhimpur district alone, a fact which the Conservator attributes to the great and sudden demand for timber by the Railway Company. It is a curious fact that there was not a single case of unlawful grazing of cattle in forests in 1883-84, and the rarity of such offences in previous years tends to prove that the reserve tracts were never wanted by the villagers as grazing-grounds. There were 3 prosecutions (in Goálpára, Darrang, and Nowgong) for causing injury by fire, but the report does not give particulars of them. The degrees of success attained in conferring protection against fire n 1883-84 and the previous year are compared in the following table:—

Forest division.	1882-83.		1883-84.	
	Area under protection. Acres.	Area burnt. Acres.	Area under protection. Acres.	Area burnt. Acres.
Goálpára	59,833	28,489	51,390	33,056
Kámrúp	57,600	5,760	54.080	6,000
Darrang and Nowgong ...	10,689	800	23,991	50
Khási and Jaintiá Hills ...	4,578	.....	4.578	19
Total	132,700	35,049	134,039	39,125

Except in the Darrang and Nowgong division, where the area under protection was doubled, and the protection afforded was almost complete, fires have been more destructive than in 1882-83. The Conservator remarks—

"The season of 1883-84 has been a most unfavourable one for the protection of forests against fire, and Lower Assam, where this particular work is carried on, has not been so dry for 15 years as it was during the year under report; and, what made matters worse, the hot winds blew in spring with unusual force, and more continuously than is generally the case."

The great failure was in Goálpára, where 63 per cent. of the area under protection was swept by fire, *viz.*, 23 square miles of the Sidli reserve, and 24 out of 25 square miles in the Guma Reserve. Mr. Mann expresses his conviction that these fires must have been intentional and malicious, and thinks that they indicate a want of good understanding between the forest officials and the people. The forest officials should be supported by the whole power of the district officer where there is any suspicion of wilful fire against any individual or village; but in the present case there was, apparently, no ground for suspecting or at least for prosecuting any one. The Sidli reserve has villages in its midst,

which are a constant source of danger; in fact, the small fire of the 9th February originated on a piece of land which was being brought under cultivation, and the great fires of 3rd to 5th April may have had a similar beginning. The fire by which the valuable *sâl* forest of the Guma reserve was ravaged must, however, have been wantonly and maliciously kindled, though the act could not be brought home to the offender.

In the Kámrúp division, the Rani reserve took fire from the burning of the private forests on the adjoining slopes of the Khási Hills. Mr. Mann wishes these annual private burnings to occur earlier in the year, and the Deputy-Commissioner of Khási Hills will be asked whether he can make this arrangement. Elsewhere, protection from fire in Kámrúp was very effectual. The prevention of fires in the Balipára reserve, in spite of the danger arising from wayside fires lighted by coolies and cartmen accompanying the Aka Expedition, is very creditable to the forest officer of Darrang. The origin of the fire on the 1st of May that burned 19 acres of the Shillong forests is ascribed to lightning The power of lightning to set grass on fire was publicly demonstrated in the sight of the players at a cricket-match on the 24th of May, when the hill-side above the cricket ground was struck, and some 700 square yards of green grass were consumed; but the forest fire on the 1st of May began near a bungalow in Upper Shillong, and may have had a merely human origin.

Reproduction.

8. Natural reproduction is a question of great importance in the *sâl* forests, most of which are being fully worked. In the natural course of things, the seedlings have to struggle through dense undergrowth, and are exposed to destruction by fires; but if properly protected, they are able to hold their own: and the Conservator's opinion is that the *sâl*-tree "is spreading with considerable rapidity, under the protection it receives in the Government forests." Artificial reproduction is carried on in the Nambar forest, where there are 73 acres of *ajhar* and *nahor* seedlings, principally the former. The teak-trees in the Kulsi plantation (168 acres) appear to be making fair growth, but this tree has been a failure at Makum, where the climate is too cold and wet. Operations in the caoutchouc forests of Darrang were checked by the Aka disturbances, which made it impossible to procure Kachari labourers; the contemplated extension of the Charduár plantation by 200 acres had, therefore, to be postponed; but 1,356 new trees were planted, and 340 young shoots were placed as epiphytes in the hollows of 153 large trees, a method of reproduction which the Government of India had specially recommended. The increase in the number of trees of medium height (from 15 to 30 feet) is considerable, but trees of a larger size are fewer than in 1882-83, the best of them having been planted close to the river Mansiri, and washed away by the erosion of its banks. The plantation of caoutchouc on the Kulsi in Kámrúp is doing well, and has been increased in area from 101 to 122 acres. The Ceara rubber-trees, which now number 131, are also thriving, but the other exotics are generally a failure.

Roads and bungalows

9. The most important piece of road-making in 1883-84 was the new line from Damra, in the Goálpára district, to the Dambu *sâl* forest, which will open up a vast store of natural wealth. The Aka Expedition did some good to the Forest Department in Darrang by the clearing and extension of roads through the reserve; in the Mikir Hills a bridle-track 40 miles in length was cut at the small cost of Rs. 94; about 36 miles of paths fit for foot passengers were cleared in the Jiri and Barák reserves in Cachar; and in other districts also existing paths were cleared and improved, and new ones made. The divisional officers' bungalows at Tura and Dibrugarh were under construction during the year, and made little progress. Inspection huts were built or repaired in all the districts, and forest officers and their subordinates are now much better off for shelter while on tour than they were three years ago.

Working of the forests

10. With the exception of the small quantities required for the use of the department, timber is now taken from the forests of Assam entirely by private agency. In protected and district forests, trade permits are granted by mauzadars in the Assam Valley and tahsildars in the Surma Valley. These permits do not cover the payment of royalty, but are merely licenses to trade in timber. The rates are 8 annas a year in the Assam Valley and the North Cachar Hills; while in the Jaintia Hills, Sylhet, and Cachar, one rupee is charged for a trading permit for six months, and one rupee per annum for every elephant employed to drag timber. The report fails to show distinctly how many of these trading permits were given in 1883-84, or what the license-fees came to, but Form No. 63 contains some particulars regarding permit-fees which seem to apply to trading permits only, as

distinguished from permits for home consumption, which are given *gratis* in the Assam Valley. These particulars are as follow:—

Trade permits.

Division.	Number.	Amount of fees. Rs.
Goálpára	80	42
Darrang and Nowgong	30	15
Sibságar	19	10

For Cachar and Sylhet we have (Appendix XV. and Form 63)—

	Cachar.	Sylhet.
Number of trade permits, 1883-84	1,963	254
Ditto for elephants	119	3

Next year's Report should contain a special paragraph on the working of the trade permit rules, showing accurately the number of permits given, and the fees realised on them.

Outturn of timber.

11. The following table gives a general view of the quantity of timber taken out of Government forests of all kinds during the last two years :—

Forest division.	Number of logs, 1882-83.			Number of logs, 1883-84.		
	Sál.	Other reserved trees.	Unreserved trees.	*Sál.*	Other reserved trees.	Unreserved trees.
Goálpára	5,415	237	.....	1,312	513	38
Kámrúp	5,736	480	53	4,014	382	53
Darrang and Nowgong	66	338	1,405	111	459	878
Sibságar	.....	466	587	.....	797	364
Lakhimpur	.....	253	1,007	.....	536	900
Total Assam Valley	11,217	1,774	3,052	5,437	2,687	2,233
Gáro Hills	774	648	163	391	404	194
Khási and Jaintia Hills	11	.....	.....	64	.....	37
Nága Hills	.....	4	6	.....	2	.....
	Logs, posts, and planks.			Logs, posts, and planks.		
Sylhet	1,931			683		
Cachar	1,539			6,306		
Total Surma Valley	3,470			6,989		

Decrease in the Assam Valley.

12. The great feature of the year, therefore, was a smaller export of *sâl* from the Assam Valley, and a larger export of timber of all kinds from the forests of Cachar. In reviewing the Report of 1882-83, the sudden development of the timber trade in that year was ascribed to the high prices then ruling in Calcutta and the abnormal demand in Eastern Bengal, and the result has apparently been a temporary glut in the market. Mr. Mann writes that the high prices

"induced the Bengal traders to purchase more timber in 1882-83 than they were able to dispose of profitably, and the consequence has been that but a small number of traders came to Assam this year, and much of the timber brought out in the Goálpára division, which was not of exceptionally good quality and large size, has remained unsold on the hands of the timber-cutters, who were thus unable to purchase more trees, although only half royalty is being collected at first."

The case of Kámrúp seems to have been much the same as that of Goálpára. These two districts, with the Gáro Hills, are the great reservoirs of *sâl* timber, and the haunt of traders who carry on the export to Bengal, while the forests of Upper Assam produce trees of other kinds, and are mainly visited for the supply of local wants, and their working has not been adversely affected by the fluctuations in the Bengal demand for *sâl*. Even in Goálpára and Kámrúp, the outturn of timber other than *sâl* was not less than last year; 770 logs and 11,451 pieces of dead timber were taken out in 1882-83, and 986 logs and 10,904 pieces in 1883-84.

Increase in Cachar.

13. The increase in the produce of the Cachar forests is attributed to a change which was made in the rates of royalty before the year began. During the calendar year 1882, the lowest rate of royalty was 2 annas per cubic foot, but from the end of that year 1 anna only has been charged on third-class timber, and 2 annas and 4 annas per cubic foot on second and first-class timber, respectively. The new rate was in operation for the last three months only of 1882-83, and the figures quoted in the margin suggest that it had something to do with the development of the timber trade in 1883-84.

Outturn of Cachar forests.

	1882-83. Logs.	1883-84. Logs.
First-class timber ..	860	536
Second-class " ..	481	164
Third-class " ..	131	5,573
Total ..	1,472	6,273

14. Appendix XVI. of the Report shows that the export of logs from private forests in Cachar rather fell off in 1883-84, though still treble the export from Government forests; 21,241 logs were exported in 1882-83, and 19,965 in 1883-84. It is, perhaps, premature to take this decrease as an indication that the timber supply in private forests is diminishing. No explanation is given of the striking fact, shown in one of the tables of Appendix XVI., that the quantity of grass and reeds exported from private forests rose from 1,253 cubic feet in 1882-83 to 1,638,303 cubic feet in 1883-84. Part of the information given in this appendix might more conveniently be embodied in Appendices XIII. and XIV., so as to present a general view of the outturn and financial productiveness of all the forests of Assam; and other parts of Appendix XVI. might with advantage be condensed, such as the three statements on pages 106 and 107, where the same figures are in some cases repeated three times over.

Private forests in Cachar.

15. The receipts of the department are shown in Chapter V. of the Report in the formal way that suits the departmental accounts, but the Chief Commissioner has before this expressed a wish that figures should be given in the Report arranged so as to show in a more intelligible way what the actual nature of the forest income is. It should be broadly divided into two heads, the income realised by the Revenue Department and that realised by the Forest Department. Under the former head come the collections from rubber and lac-*mahâls* and from the cassia-*mahâl* in the Jaintia Hills, the value of timber standing on waste land grants, the *gurkâti* licenses in the Gáro Hills, the price of permits and licenses issued by mauzadars and tahsildars. The income realised by Forest Officers consists mainly of the value of timber worked out by the department, and sold or used for departmental purposes, the royalty levied on timber and other forest produce worked out from reserved or protected forests, the transit duties on forest produce imported from foreign countries. An attempt has been made in the accompanying statement to separate the receipts under some of these heads, but it has not been possible to make the distribution complete, or to show the heads in all the detail required; and this should be done in future reports. Form No. 53, attached to the Report, gives the income of each forest division classified in one way. Appendix XIV. gives a different and more detailed classification, but it does not contain the whole income of any division, and it omits Cachar and Sylhet altogether. Next year this imperfection should be corrected.

Receipts.

1	2		3		4		5		6		7	
Division	Royalty on forest produce.		Revenue from forests not managed by Government.		Value of timber on lands taken up for cultivation.		Rubber.		Miscellaneous		Total.	
	1882-83	1883-84	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84	1882-83.	1883-84.	1882-83.	1883-84.
	Rs.	Rs.	Rs	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.
Goálpára	58,951	34,034	199	43	.....	.....	330	.. .	599	741	60,079	34,868
Kámrup	63,029	51,676	.....	.....	120	716	1,610	906	544	1,609	65,303	54,906
Nowgong-Darrang	10,471	7,187	.....	.....	1,516	3,515	23,245	22,395	780	396	36,012	33,823
Sibsagar	6,121	6,759	162	267	3,547	917	....	...	112	329	10,242	8,245
Lakhimpur	4,124	5,810	.....	37	2,930	2,924	13,937	6,838	627	9	21,618	15,618
Gáro Hills	10,322	9,501	-629	450	.....	.....	....	754	7,205	5,775	18,156	[illegible],480
Khási and Jaintia Hills	1,275	1,808	2,867	2,680	.....	.....	600	600	193	116	4,935	5,204
Naga Hills	40	12	.....	.....	.....	.....	1,200	800	....	...	1,240	812
Sylhet	8,229	6,544	.....	.....	No particulars.		...	....	20	14	8,249	6,558
Cachar	16,916	29,330	1,486	3,902			3,000	1,000	1,358	681	22,760	34,913
Direction	.....	.....	.....	.....	.....	.....	....	....	....	....	.....	17
Total	179,738	1,52,984	5,043	7,379	8,113	8,102	43,922	33,292	11,438	9,670	2,48,594	2,11,444

16. It is the receipts shown in columns 2 and 3 that are due directly to the working of the Forest Department. The decrease under column 2 is owing to the causes already explained in treating of the outturn of timber; it should be noted, however, that some portion of the falling off is attributable to the cessation of Government operations in the forests, for column 2 shows the value of all trees, &c., taken out, whether by Government or private agency, and Government agency alone accounts for the following figures in each of the two years:—

Royalty.

Division.	Value of forest produce taken out by Government agency.	
	1882-83. Rs.	1883-84. Rs.
Goálpára	11,840	.....
Kámrúp	1,458	252
Darrang and Nowgong	2,578	745
Sibságar	1,566	23
Gáro Hills	.....	755
Sylhet	30	.....
Cachar	61	.....
Total	17,533	1,775

17. The figures in column 3 represent the Government share of the proceeds of certain private forests in the Gáro and Khási Hills, and the receipts from the taxation of foreign timber in other districts. Column 4 shows the amounts paid under the rules for the valuation of forest-produce on waste land grants, and lands taken up on cultivating leases. The valuation is generally made by forest officers, and under rules recently issued will always be so made where possible, but the amount is collected by the Revenue Department. The proceeds realised within the year on account of the sales of rubber-*mahál*s are shown in column 5. This item of revenue is one with the collection of which the Forest Department have nothing to do: it is managed by the Deputy-Commissioner in the same way as the revenue from fisheries or elephant-*mahál*s, which are similarly sold. Paragraph 184 of the Report gives certain statistics of the import and export of rubber, which have apparently been obtained from Deputy-Commissioners, or perhaps, in the case of exports, direct from the steamer companies. The total is an import of 1,642 maunds from the surrounding foreign territory into Assam, and an export of 9,792 maunds from Assam to Bengal, and the inference is that the difference, 8,150 maunds, is the produce of Assam. But the exports are registered with exactitude, while the imports are registered very imperfectly. Column 6 requires comment in the case of the Gáro Hills, where the "miscellaneous" receipts consist mainly of the fees paid for *gurkati* licenses, *i.e.*, licenses to cut minor forest produce for domestic use. The rates are six annas per house for residents in the Gáro Hills and Rs. 2 per license for residents of other districts, and the amount realised in 1883-84 was Rs. 5,658, against Rs. 6,103 in 1882-83; it was made up of Rs. 1,176, from Gáros and Rs. 4,420 from outsiders. Elsewhere, miscellaneous receipts are chiefly the proceeds of confiscated, waste, or drift wood, or from fines and other sources not specified in detail.

Other sources of income.

18. While the receipts of the department have decreased by Rs. 37,167 (15 per cent.), the expenditure has risen by Rs. 27,739 (21·6 per cent.) as the following table shows:—

Expenditure.

A.—Conservancy and Works.

	1882-83. Rs.	1883-84. Rs.
Removal of forest produce by Government agency	965	1,247
Ditto ditto by private agency	5,623	6,751
Confiscated and drift wood	129	54
Live and dead stock	9,476	14,35
Communications and buildings	17,273	20,994
Maintenance and improvement of forests	39,763	43,111
Miscellaneous	2,700	4,131
Total	75,929	90,642
B.—Establishments.		
Salaries	79,399	89,584
Travelling allowance	13,213	15,342
Contingencies	3,292	3,994
Total	95,894	1,08,920
Grand Total	1,71,823	1,99,562

It is strange that the working out of a smaller quantity of timber in the Gáro Hills and Kámrúp should have cost more to the department in 1883-84 than the working out of a larger quantity in 1882-83. Part of the increase is ascribed to the larger grant of commission to the Gáro Hills lashkars and mandals on *gurkáti* licenses, but the value of the licenses decreased, and the commission, therefore, ought not to have increased. The other two heads of conservancy and works which were more costly than in 1882-83 are live and dead stock and communications and buildings: in the former case the difference is explained by the purchase of two elephants and of certain stores; in the latter by roadwork in the Gáro Hills and Kámrúp, and the purchase of a bungalow for the forest officer in Gauháti. The increase of Rs. 10,195 under "Establishments" is due to the promotion of two divisional officers, and to the enlargement of the permanent establishment, by transferring to it, with the Government of India's sanction, a portion of the establishment hitherto classed as temporary. Temporary establishments do not appear in Part B. of the accounts, but are merged in the various headings of Part A. to which they belong.

Cost of working out timber (private agency).

	1882-83. Rs.	1883-84 Rs.
Gáro Hills	1,079	1,711
Kámrúp	898	1,487

19. A very important matter, which has scarcely been touched upon in the Report, is the way in which the extension of forest reclamation affects the villagers. The question occurs not so much in the case of reserved forests (where the boundaries are defined after an elaborate enquiry into the existing rights and possible future requirements of the neighbouring cultivating communities) as in the case of protected and district forests, and especially as regards the

The forests and the villagers.

latter, which are now managed by mauzadars under the direct orders of the forest officer. The mauzadar's authority in his mauza is considerable, and it is important that it should not be exercised to prevent the people from enjoying access to and use of the forests for all reasonable purposes. The Assam ryot has always been accustomed to use jungle produce (grass, firewood, &c.) freely, and the object of the system adopted in district and protected forests has been to regulate rather than limit his liberty in this respect. The Rules for district forests in the Assam Valley and in Sylhet and Cachar were published just as the year began. Permits to ryots to supply themselves with timber and other forest produce exclusively for their own use are granted free of charge by mauzadars in the Assam Valley, and in the Surmá Valley by tahsildars at the rate of 8 annas per house for the year. The rate is the same in the protected forests of the Surma Valley. In the North Cachar Hills, ryots get home permits free of charge. In the district forests of the Jaintia Hills the same distinction is made between residents and outsiders as in the *gurkáti* licenses of the Gáro Hills: Jaintia ryots pay 8 annas per house, and outsiders one rupee per license for the year. The number of permits granted under these Rules is unfortunately nowhere stated in the Report, and this, perhaps, is due to excessive delay in issuing the printed form of permits: the Chief Commissioner found that in the Darrang district they had not been distributed in January, and it is possible that elsewhere, too, the system had hardly come into full working by the end of the year. Forest officers should in future ascertain from mauzadars and tahsildars, and mention in their annual reports how many houses in their respective jurisdictions were authorised to supply themselves with forest produce. The system has excited a good deal of comment in one of the native newspapers of Assam, and the Chief Commissioner desires that it should be carefully watched. The most severe criticism, however, was based upon a misunderstanding of the intentions of the Government. It was assumed that the ryot was to be taxed for the forest produce on his holding: but this is not the case, all ryots being perfectly free to make whatever use they please of such produce, excepting such reserved trees as have not been grown by themselves or their predecessors in interest, and for these latter they are not required to pay anything so long as they are left standing. The notification which gave rise to this misconception (it was dated the 31st December 1883), has since been revised, and now expresses the Chief Commissioner's intentions more clearly. It is difficult to believe that under existing orders forest restrictions can possibly press with hardship upon the people, but if any hardship is proved Mr. Elliott is prepared to relax them. The subject must be specially taken up in next year's Report, the number of home permits shown for every district, and particulars given of the extent to which the permits have been used, and whether they adequately meet the wants of the people. In the present report, the only information given, with the exception of the receipts from *gurkáti* licenses in the Gáro Hills, is the following :—

	Firewood.		Firewood licenses. Monthly.		Firewood licenses. Annual.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
Division.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
Sibságar	111	332	.....	.....	.....	.....
Khási and Jaintia Hills	231	.....	.....	.....	.....	.....
Lakhimpur	.....	.....	157	156	.....	396
Darrang-Nowgong	.....	.....	.....	11	.....	18
Kámrúp	.....	.....	17	50	.....	.....

These figures are taken from Appendix XIV.: the figures under "Firewood" are believed to be receipts from licenses to catch drift-wood in mountain streams; but neither these nor the firewood licenses are so classified as to correspond with any of the permit rules above quoted. For the Surma Valley we have (Appendix XV. and Form 63) the number of home permits in Cachar shown as 56, and the fees realised on home permits in Sylhet shown as Rs. 628.

20. Mr. Elliott has pleasure in endorsing the Conservator's praise of the work done by Mr. Mein, Mr. Jellicoe, Mr. Copeland, Mr. Campbell, and Mr. Fordyce. Mr. Ludlow, of whom unfavourable mention is made, suffered much from bad health, and has died since the close of the year. Regarding Mr. Mann himself, the Chief Commissioner can only repeat the same commendation on his activity, zeal, and technical ability which he has expressed in his Resolutions on the Reports of former years.

By order of the Chief Commissioner of Assam,

C. J. LYALL,

Offg. Secretary to the Chief Commissioner of Assam.

A. S. Press (Revenue) No. 96—454—26-9-84.

No. 23 F., dated Calcutta, the 8th January 1885.

From—A. MACKENZIE, Esq., C.S., Secretary to the Government of India.

To—The Chief Commissioner of Assam.

I AM directed to acknowledge the receipt of your Secretary's letter No. 2404 of the 27th September last, submitting the Progress Report of Forest Administration in Assam for the year 1883-84, together with your Resolution thereon.

Your review of the Report is so detailed and appropriate that it is only necessary to recapitulate the main features of the progress effected during the year.

Areas

2. The changes in the forest areas were as follow :—

CLASS OF FORESTS.	AREA, IN SQUARE MILES.		
	At the commencement of the year.	Added or excluded.	Total at the close of the year.
Reserved forests	2,177	+137	2,314
Protected "	662	+201	863
District "	6,766	—344	6,422
Total ...	9,605	—6	9,599

The additions to the reserves occurred in the following districts :—

	Square miles
Garo Hills	79 50
Goalpara	18
Kamrup	0 35
Sibsagar	39 50
Total	137·35

The addition to the protected forests was made in Cachar. The forest areas represent now the following percentage of the total area of the province :—

Reserved forests	5
Protected "	2
District "	14
Total . .	21

Unfortunately this area is very unevenly distributed. In some districts the area is not sufficient, while in others it is larger than required. About 7 square miles of district forests were given away in waste land grants during the year.

Boundaries

3. Of a total length of 834 miles of artificial and demarcated natural boundaries, 758 miles were cleared during the year, and 560 miles inspected by the Divisional Officers. This is satisfactory. The total cost of clearing comes to Rs. 15 a mile, against Rs. 19 in 1882-83.

4. The number of new cases of breaches of the forest law was as follows :—

Protection of the Forests.

Cases taken into Court	....	...	...	86
„ compounded	...	...	...	45
		Total	...	131

These data show an increase on the cases of the previous year, but the total number is exceedingly small, as they refer to an area of 9,599 square miles. Such a small number of offences per square mile is not likely to occur in any other branch of the administration. No cases of illegal grazing occurred during the year, and His Excellency the Governor General in Council agrees with you in considering that forest conservancy in Assam has so far not interfered with the people's comfort and rights.

5. The following were the results of fire-protection during the year :—

Fire Conservancy.

Area attempted	...	...	...	209 square miles.
„ burnt	...	...	...	61 „ „
„ actually protected	...	...	...	148 „ „
Percentage of failures to area attempted			...	29 per cent.
Cost per square mile actually protected				Rupees 64.

These results are less favourable than those of the previous year; the percentage of failures has risen from 26 to 29, and the cost per square mile from Rs. 58 to Rs. 64. The principal failures have again occurred in Goalpara. It is difficult to understand why the efforts of the Department in that district should be wanting in success, when it is practicable to protect the forests in the adjoining Western Dúars. His Excellency in Council is aware of the special difficulties, but, considering the importance of the sâl forests in the Eastern Dúars, he trusts that future efforts will be more successful than those of the past three years.

6. Little progress has been made during the year in the artificial reproduction of the forests, only 34 acres having been added to the planted area. Better progress is expected to be made in 1884-85.

Sowing and Planting.

7. The following table shows the outturn of the forests, excluding those of Sylhet and Cachar :—

Yield of the Forests.

Class of Forests.	Number of trees.			Total.		Poles, Boats, and Dead wood, in cubic feet.	Grand Total, in cubic feet.
	Sâl.	Other reserved trees.	Miscellaneous.	No.	Cubic contents.		
From Reserved forests	4,023	860	373	5,256	157,680	120,940	278,620
„ Protected and District forests ...	1,869	2,233	2,091	6,193	185,790	200,575	386,365
Total in 1883-84	5,892	3,093	2,464	11,449	343,470	321,515	664,985
„ 1882-83	12,002	2,426	3,225	17,653	...	...	...
Increase in 1883-84	...	667	...	...	...	...	...
Decrease „	6,110	...	761	6,204	...	...	.

The yield in sâl has fallen off considerably, which is said to be due to the overstocked state of the Bengal market.

The yield has, as suggested in the orders of the Government of India on the Report for 1882-83, for the first time been given in cubic feet; the data are, in many instances, as yet estimates, but endeavours should be made to render them more accurate every year.

No 49 F, dated the 25th January 1884

8. The yield of the Cachar and Sylhet forests is given as follows :—

Class of Forests.	Quantities removed, in cubic feet.			
	Logs.	Poles and planks	Firewood.	Total.
From Government forests	221,425	92	6,828	228,345
„ Private „	408,729	1,167	11,648	421,544
„ Foreign „	39,445	...	228	39,673
Total ...	669,599	1,259	18,704	689,562

These data show a slight increase over the yield of 1882-83.

9. The imports of rubber from the Hill States into Assam are estimated at 1,642 maunds, while 10,244 maunds have been exported by steamer and boats. From these data it is estimated that 8,602 maunds were collected in Assam. No reliance can, however, be placed on the estimate of imports. The Rubber Mahals were sold for Rs. 36,700.

It is to be regretted that the experiment, which was commenced in 1882-83, of testing the yield of 50 full-grown rubber trees has not been satisfactorily continued during the year under review. When it was found that labour could not be obtained in proper time, the tapping should have been postponed until 1884-85, rather than risk the break-down of the experiment.

10. 7,470 trees, representing a value of Rs. 24,408, were made over free of charge to the Assam Railway and Trading Company, in accordance with the concession granted to them.

Financial results

11. The financial results compare as follow with those of the previous year :—

Year.	Receipts	Charges.	Surplus.
	Rs.	Rs	Rs.
1883-84	2,11,415	1,99,562	11,883
1882-83	2,48,605	1,71,823	76,782
Increase in 1883-84	...	27,739	...
Decrease „	37,160	...	64,899

The Receipts have fallen off, and the Charges increased, resulting in a considerably smaller surplus. This result is due to the dull state of the timber market in Bengal, and to increased expenditure under live and dead stock, communications and buildings, demarcation and improvement of the forests, and under Establishments.

12. On the whole, the results of the year's administration, though perhaps not so good as in former years, are satisfactory, and His Excellency in Council is pleased to endorse the commendation bestowed by you upon the Conservator of Forests.

N. C. D.—Home Department Press—No 8—13-1-85—210

PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

PROVINCE OF ASSAM

FOR THE YEAR

1884-85.

By GUSTAV MANN.
CONSERVATOR OF FORESTS, ASSAM.

SHILLONG:
PRINTED AT THE ASSAM SECRETARIAT PRESS.

1885.

No. 73A.

FROM GUSTAV MANN, ESQ.,

Conservator of Forests, Assam,

TO THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Dated Shillong, the 15th August 1885.

SIR,

I HAVE the honour to submit the Annual Forest Administration Report for this Province for the year 1884-85.

I have the honour to be,

SIR,

Your most obedient Servant.

GUSTAV MANN,

Conservator of Forests, Assam.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN ASSAM

FOR THE YEAR 1884-85.

By GUSTAV MANN,

Conservator of Forests, Assam.

INTRODUCTION.

The chief event in the administration of the Assam Forests during the year has been the preliminary gazetting of the forests which it is proposed to declare reserves in the Lakhimpur district, and the appointment of a Forest Settlement Officer for the purpose of their final appropriation, to ensure a supply of timber and other forest produce for the Lakhimpur district and the Province in general.

2. The efficient protection of the existing reserves against encroachment has been ensured by the proper demarcation and clearing of all artificial boundaries on the same principle as has been followed for the last two years. A detailed record of the work so done was kept in the Conservator's office.

3. The preliminary surveys of the Government reserved forests have been completed, and maps filed in the Conservator's office and the divisional forest offices concerned, so that survey work can now be more concentrated with a view to prepare proper working plans.

4. The protection of the forests has been perfected during the year, and a knowledge of the intentions of Government as regards forest conservancy has become very general amongst the people, in consequence of the circulation of the forest rules, and the mauzadars are reported to have exerted themselves everywhere to further the forest protection, as well as the revenue control over the produce removed.

5. No complaints of any kind that the forest rules press hard on the people have been received; but, on the contrary, they look on them rather as a boon, because they define clearly what ryots are entitled to, and the latter are fully aware now that the Forest Officers will at all times receive any complaints about forest matters they might wish to make, which, together with the great abundance of forest produce in the Province, makes it quite impossible that the restrictions imposed up to date could cause hardship to the people.

6. The fire protection has been very successful in spite of a most unfavourable season, and was effected with but a very slight increase in the expenditure on this work.

7. Plantation work has received close attention, and the area been increased by 146 acres, which is as much as the scare for the Akas would admit of. The latter has greatly increased the labour difficulty at the Charduar plantation.

8. Road work and buildings have been pushed on energetically, especially the former, in the Gáro Hills. Houses for Divisional Forest Officers have now been provided both in the Garo Hills and Lakhimpur divisions.

9. The yield has been small, owing to the depressed state of the timber trade, which has also caused a falling off in the revenue, and thus caused a deficit, which, however, the Conservator feels confident, will be compensated for by increased sales and receipts as soon as the timber trade recovers.

CHAPTER I.

AREA AND BOUNDARIES.

Area of reserved forests.

10. The area of reserved forests in Assam has been increased by 10,720 acres, or 16·75 square miles. The districts and sub-divisions or mauzas in which this increase took place are the following :—

Name of district.	Name of mauza.	Name of forest.	Area.
Gáro Hills	Mauza No. 4	Dambu forest	4,960
Darrang	Balipára mauza	Addition to the Charduar reserve	5,760

11. The total area of reserved forest in Assam with the above additions is shown in the prescribed tabular statement (No. 49) attached to this report, where, in the Goálpára division, also an increase of 376 acres is shown in the area of the Bengtol and Darogaon reserve, and a decrease of 543 acres in the area of the Bhumeswar Hill reserve, in consequence of remeasurement.

12. The same statement further shows an increase in the area of the Sursuria Hill reserve by 725 acres, or 1·13 square miles, and a decrease of 364 acres in the area of the Barduar reserve, both in the Kámrúp division, and an increase in the area of the Charduar reserve, Darrang division, by 7,181 acres, or 11·22 square miles, all of which changes are also the results of remeasurement. The usual description of the newly-added reserves is given in Appendix I

13. The most valuable of the new reserves is the Dambu forest in the Gáro Hills, which consists chiefly of large Sâl-trees over 6 feet in girth.

14. The addition to the Charduar reserve is mixed evergreen or lower hill forest, with a large proportion of the more valuable timber trees; some India-rubber trees (*Ficus elastica*) are also met with

15. About the Jhansi reserve, in the Sibságar district, situated immediately at the foot of the Nága Hills, claims were preferred by the Kampungia and Ooramung Nágas to a large portion of this forest, they, however, agreeing to let Government remove any timber that might be required. As this practically means that the Nágas consider themselves the owners of this forest and wish to *jhúm* it, and because it is not considered advisable to make a settlement with them by paying compensation for the rights they claim, the Conservator has recommended that the Jhansi reserve be thrown up, and other forests be selected in the adjoining Nága Hills district to compensate for this. The question is now under the consideration of the Chief Commissioner.

16. The report of the Forest Settlement Officer regarding the Langai and Singla proposed reserve in the Sylhet district has not as yet been received. The delay is chiefly due to the want of proper records regarding former land settlements and the absence of any definition or limitation of privileges people have been allowed to enjoy within these forests.

Area of proposed reserves.

17. The areas which were proposed as Government reserved forests during the year under report, and gazetted in accordance with Section 4 of the Forest Act, were the following :—

Name of district.	Name of mauza.	Name of forest.	Area in square miles.
Kámrúp	Chhaygaon	Chhaygaon	4·22
Lakhimpur	Parapara mahál	Parapara	28·15
Ditto	Lamah mauza	Dehingmukh	21·48
Ditto	Jaipur „	Jaipur	40·50
Ditto	Jokai and Kotoha mauzas	Jokai	14·
Ditto	Bharalwa mauza	Bharalwa	10·
Ditto	Kaddam „	Kaddam	20·
Ditto	Chapatoli Powal and Makum mauzas.	Upper Dehing	117·

18. Great press of other work and the change of officers has prevented the final settlement of the Chhaygaon forest in the Kámrúp district, where three different Forest Settlement Officers have had to be gazetted one after the other; and in the Lakhimpur district also, the first Forest Settlement Officer went on leave before he had time to make the necessary investigations, whilst the officer gazetted after him has not submitted his

report up to date. The Chief Commissioner has, however, personally enquired into the question of making these forests reserves when in the Lakhimpur district, and signified his approval of all the proposals.

19. The Bijni forest in the Goálpára district, referred to in paragraph 13 of last year's report, could not be gazetted under Section 4 of the Forest Act, as the Chief Commissioner did not approve of the southern boundary line fixed by the Deputy-Commissioner, because, meanwhile, whilst the matter was under consideration, fluctuating cultivation had been started north of that line. The question was already referred to in the Chief Commissioner's Resolution, paragraph 3, on last year's Forest Report.

Area of protected forests

20. No forests were gazetted during the year as "protected" under Section 28 of the Forest Act, and the area of these forests remains, therefore, unchanged. They are enumerated under the head of "Area of unreserved forests" in the tabular statement No. 49 attached to this report.

Area of district forests

21. The area of district forests, exhibited in the same statement, has been reduced by 20,532 acres, of which 10,720 were declared reserved forests and 9,812 acres allotted for cultivation.

Boundary work.

22. The demarcation and survey of new areas to be proposed as Government reserved forests has been in progress in the Goálpára, Kámrúp, Darrang, Nowgong, Sibságar, and Lakhimpur districts during the year.

23. The work done in the way of clearing boundary-lines and repairing boundary-marks of existing reserved and protected forests, as well as the inspection of these boundaries by Divisional Officers, is shown in the tabular statement, Appendix II., attached to this report.

The expenditure on this very necessary work has been less by Rs. 2,760, and nearly the whole of this decrease took place in the Lakhimpur division; it is accounted for by the higher cost of first clearings and the putting up of boundary-marks, as was done in the previous year.

The proportion in which this expenditure was incurred in the different divisions was as follows :—

	Rs.	A.	P.
Gáro Hills division	802	2	6
Goálpára "	448	13	4
Kámrúp "	1,093	2	3
Darrang and Nowgong division	1,312	8	0
Sibságar division	830	13	0
Lakhimpur "	2,919	8	5
Cachar "	999	11	7
Khási and Jaintia Hills division	84	14	0
Total	8,491	9	1

Compensation paid

24. In the Gáro Hills, Rs. 385 were paid as compensation to the villagers of Dambu for 17 houses in the newly-gazetted Dambu reserve at the rate of Rs. 25 for each of 13 big houses, and Rs. 15 for each of 4 small houses, it being considered best for them to leave the forest and establish a new village outside. Besides this, a sum of Rs. 140 was paid to the villagers of Dimbril for removing 7 houses at Rs. 20 each from the proposed Sangsak reserve in the same district, which has been gazetted in accordance with Section 4 of the Forest Act since the close of the year.

Account of changes in area and boundary work according to divisions.

25. The changes in the areas of the Government forests and the work done for the keeping up of the demarcated boundary-lines according to divisions were as follows.

Gáro Hills division.

26. The area added to the Government reserved forests in the Gáro Hills was 4,960 acres, or 7·75 square miles, bringing up the total in that district to 55,843 acres, or 87 square miles, all of which are either Sâl, or have a large proportion of Sâl in them.

27. The boundary clearing and repairs of boundary-marks, as also the inspection of boundaries by the Divisional Officer have not been equal to the work done in the previous year, which has to be attributed to the necessity there was for the Divisional Officer remaining most of the time on the Dambu road on account of the extreme difficulty of obtaining labour for this work and keeping the labourers content when once brought there, owing to the unhealthiness of the locality. The pushing on of this road to make the Dambu forest accessible was urgently required to keep up forest receipts, as the trade in *dhums* carried on by duffadars had almost come to a standstill.

Reference to Appendix II. of this report will show that 72 miles of boundary-lines were cleared out of a total length of 102 miles, and 120 boundary-mounds repaired, out of a total number of 168.

The length of boundary-line inspected by the Divisional Officer was 46 miles, out of a total length of 102 miles.

Goalpara division

28. In the Goálpára division there has been a slight decrease in the area of Government reserved forests by 167 acres, as already stated above, owing to remeasurement of several of the forests, no new proposals of further reserves were submitted during the year under notice, but the necessary report about the Panbari and Pechadavery forests and maps have been received from the divisional officer, and will shortly be submitted for the orders of the Chief Commissioner.

29. All the existing boundaries of reserves in this division were cleared and boundary-mounds repaired where necessary, with the exception of the southern boundary of the proposed Bijni reserve, for the clearing of which there was no necessity, because the Chief Commissioner had disapproved of it, and a revision been ordered. All cleared boundaries were inspected by the Divisional Officer as shown in Appendix II. The total length of boundary-lines in this division, exclusive of the Bijni forest, is 69 miles, and the number of boundary-marks 349. The demarcation of several lines has been much improved during the year.

The expenditure on this work has been about Rs. 448, or Rs. 117 more than in the previous year, which was very necessary.

Kámrup division

30. No addition was made to the Government reserved forests in the Kámrúp district, but the total area is increased in consequence of remeasurement. The Sursuria reserve has been found to be 725 acres more than had been stated in previous reports, whilst the Barduar reserve was found 364 acres less.

The Chhaygaon forest in the Kámrúp district, measuring 2,706 acres, was proposed during the year as a Government reserved forest.

31. The demarcated survey lines, forming the boundaries of reserved and protected forests in the Kámrúp division, are very extensive, measuring not less than 389 miles, out of which 384 miles were cleared. Of the total number of 1,955 boundary-marks, 1,824 were repaired, and the Divisional Officer inspected 325 miles of boundary-line, leaving 64 unvisited, which latter compares unfavourably with the work done in the previous year, when only 18 miles were not inspected by the Divisional Officer.

The length of boundary-lines added during the year was 136 miles, and the boundary-marks were increased by 298, the greater portion of which belongs to the Chhaygaon forest.

The expenditure on this work in the Kámrúp division also shows a decrease as compared with the previous year, because there was less new work.

Darrang and Nowgong division.

32. In the Darrang and Nowgong division the area of Government reserved forests has been increased by 12,941 acres, or 20·22 squaremiles, 9 miles of which are accounted for by the forest adjoining the former Charduár reserve in the south, between the Diputa and Belsiri rivers, having been gazetted during the year, and 11·22 miles having been added to the same reserve in consequence of remeasurement.

Additions to the Kholahat and Deboka reserves in the Nowgong district and two new areas, the Bamoni and Suang forests, in the same district, have been selected as reserves but the demarcation and survey were not completed before the close of the year.

33. Reference to Appendix II. of this report will show that all boundary-lines of reserves in the Darrang and Nowgong division were cleared and inspected by the Divisional Officer, and that all boundary-marks were repaired.

The cost of this work was Rs. 277 more than in the previous year which is accounted for by the new demarcation work carried out in the Nowgong district, but not shown as yet in Appendix II., because it was not completed during the year under report.

The cost of keeping the boundaries of reserves in the Darrang district in proper order was actually Rs. 366 less than in the previous year, whilst in the Nowgong district it came to Rs. 611 more than in 1883-84 on account of new work.

Sibságar division.

34. No change took place in the area of the Government reserved and protected forests in the Sibságar division. The extent of these forests, situated in the Sibságar district, and that within the Nága Hills district, is shown in Statement No. 49 attached to this report.

New areas have been selected, and their demarcation and survey commenced, this work is being continued in the current year.

35. The clearing of all existing boundaries and repairs of boundary-marks were carried out, except in the Jhansi and Desai reserves, in which the work remained undone, in accordance with the order of the Chief Commissioner, on account of the claims preferred by the Nágas as mentioned in paragraph 15 of this report.

Besides the boundaries cleared formerly, seven miles of the Ladoighur, forming the Inner Line, and southern boundary of the Abhaypur reserve were cleared this year for the first time, leaving about four miles and sixty chains to complete this boundary.

The Divisional Officer inspected, out of a total length of 101 miles of boundary-line, 81, the remaining 20 miles were not done owing to the serious illness of Mr. Fordyce towards the close of the working season.

The expenditure in the Sibságar division on this work has been Rs. 281 less than in the previous year, besides which, Rs. 120 were spent on new work. This is satisfactory. The Divisional Officer reports that all the works, except in the Mikir Hills, were done by contract, and that it was completed earlier in the season than in former years, which is an advantage, because inspection is facilitated thereby.

Lakhimpur division.

36. No forests have up to the present been gazetted as reserves in the Lakhimpur district, but 160,723 acres, or 251·13 square miles, were proposed under Section 4 of the Forest Act. Until these areas are reported on by the Forest Settlement Officer and finally approved of by the Chief Commissioner, they will remain to be shown as protected forests. No addition to the latter class has either been made during the year in the Lakhimpur district.

37. The total length of boundary-lines in the Lakhimpur division is 134 miles, out of which 112 miles were cleared and 83 miles inspected by the Divisional Officer. Mr. Barker accounts for not having inspected all the boundaries by the difficulty he had at first to get contractors to clear the lines and the late date by which it was finished. These men in the Lakhimpur district, no doubt, will do their work quicker, as they become more accustomed to it, as has been the case in the Sibságar district, and every effort will be made to complete it in future by the 1st of January.

Out of a total number of 1,076 boundary-mounds, 770 were repaired.

The above work, done to keep up the demarcated boundaries of the forests in the Lakhimpur division, is not so good as in the previous year, but there has been an improvement in inspection by the Divisional Officer. The great defect, however, is that the work was not done early in the season, and improvement as regards this must be effected in the current year, because these boundaries should be made available for patrolling as early in the season as practicable.

The work done by contractors is reported to be more expensive and worse done than by imported coolies; but as the latter take up much time of the officers in charge of ranges to supervise their work, which can be better spent in looking after the protection of the forests, the effort made hitherto to clear boundary-lines by contract will be continued.

The clearing and keeping up of boundaries in the Lakhimpur division continues to be a heavy item of expenditure. An effort has, however, been made by the Divisional Officer during the year under report to reduce the cost of boundary-clearing, and this was fairly successful, the total expenditure on this indispensable work during the year having been only Rs. 2,920, as compared with Rs. 5,244 in the previous year. Out of the total expenditure on this work, the amount of Rs. 2,027 was spent on clearing of old boundaries and Rs. 893 on the opening out of new lines.

Mr. Barker has explained that the high average rate per mile, recorded in paragraph 47 of last year's report, was due to heavy advances made in 1882-83, but not adjusted until 1883-84.

Cachar division.

38. In the Cachar division, the area of Government reserved and protected forests has remained unchanged.

39. The clearing of demarcated boundary-lines and the repairs of boundary-marks in the Cachar division have been satisfactory, only 33 chains of line, being part of the Mupa Mahur protected forest in the North Cachar Hills, having remained uncleared. It would, however, have been still more so, if the Divisional Officer had convinced himself by personal inspection how this work had been done, instead of which, Mr. Young has only inspected 37 miles out of 70, and, as in former years, he has done a less proportion of this important and indispensable work than every other divisional officer.

Out of the 70 miles of boundary-lines which there are in the Cachar division, 21 miles were cleared to a width of 20 feet, and 49 miles to a width of 10 feet only. For the sake of economy the clearing to a width of 20 feet is done every third year.

The boundaries of the Cachar forests have now been cleared for a number of years by contract, so that there should not be much fluctuation in the average cost per mile of this work, neither should the latter increase. In the year under report it has been Rs. 14-4 per mile, as compared with Rs. 13-9 in the previous year.

Sylhet division.

40. No Government reserved forests have as yet been gazetted in the Sylhet district, and no alteration has been made in the area of the protected forests, pending the reports of the Forest Settlement Officer.

41. The former northern boundary of the Langai and Singla protected forest, measuring 6 miles in length and having 25 boundary-posts and mounds of the prescribed size on it, was not cleared on account of the change which is to be made in this boundary, when the forest is declared a reserve.

Khási and Jaintia Hills division.

42. The only reserve in the Khási and Jaintia Hills is the Saipung forest, and, as all the boundaries of this are natural ones, no demarcation is needed.

The Riatkhwan forest in the neighbourhood of Shillong, although not gazetted under the Forest Act, is in every way protected like a reserve; its boundaries, as well as those of the Shillong estate, and of a number of smaller areas taken up near Shillong with a view to secure the water-supply, and for other purposes, are cleared regularly every year as fire-lines. The masonry pillars have been repaired where necessary.

Nága Hills division.

43. No change in the area of the forest protected in the neighbourhood of Kohima in the Nága Hills has taken place during the year under report.

CHAPTER II.

Surveys, Working Plans, and Plans of Operation.

Survey work.

44. Forest work in Assam, as compared with other Provinces, was started late, and is even now, it may be said, in its first course of organisation. The principles acted up to in establishing a sound system of forest conservancy were stated in paragraph 6 of the Forest Report for 1878-79, and approved by the Chief Commissioner.

45. In accordance with those principles, the first aim of the Conservator has been to secure all the better forests as speedily as possible from further spoliation, by having them properly demarcated and gazetted, without waiting for their surveys, because the latter necessarily required much time, and the danger to the forests was great, inasmuch as a large proportion of the population lived by, and did not know any other mode of cultivation but *jhúming*. These people were in many parts of the Province in the habit of clearing forests without asking permission, or even giving notice of their intention to do so. Enormous areas of valuable forests had thus been destroyed for the sake of a rupee or two more gain, in consequence of the rich soil and the rich manure furnished by the ashes of the trees burned.

46. Application for waste land grants for tea cultivation had been made with an equal disregard for the preservation of forests, all of which were good reasons for their speedy selection, demarcation, and gazetting, before survey; nevertheless, survey work was immediately taken in hand in all the divisions as soon as they were started, and pushed on first where danger of encroachment appeared to be greatest, on account of either no survey of the land adjoining the Government forest having been made at all, or where, as is frequently the case, the survey of the adjoining land had been very defective, and its demarcation equally so. This way of carrying on surveys has appeared piecemeal work to the Chief Commissioner; but it has been most necessary and useful. It protected those forests first where the danger of encroachment was greatest, and we have now maps of all the forests, which are indispensable for the proper management and protection of them.

47. There are at present 78 Government reserved forests, measuring in the aggregate 1,499,141 acres, with 941 miles of demarcated boundaries, which speaks for itself. The time has now come when survey work may be done in greater detail as regards the interior of forests, and when it can be concentrated in one district, or even one forest, in connection with the valuation surveys, which have to be made to obtain the necessary information for working plans.

Working plans.

48. This fits in with recent orders of the Government of India as to the organisation of a Working Plans Division, which the Conservator hopes to organise in the current year.

49. In addition to the surveys hitherto carried out, other arrangements, preparatory to the making of working plans, have been made for some years past, by the keeping of registers of yield and records of works of re-production and improvements, for the different ranges in all the forest divisions.

50. As regards the necessity for working plans in this Province, there can be no doubt that the valuable Sâl forests in the Gáro Hills, Goálpára, and the Kámrúp districts should, on as early a date as practicable, be managed in accordance with a carefully prepared working plan, to regulate the removal of timber from them, and to ensure the requisite arrangements for re-stocking cleared areas, either by natural reproduction, or sowing and planting, as well as by their protection against fire.

51. In all the other districts of Assam the demand for timber and other forest produce is as yet much below the ordinary capability of the forests, and no working plans are needed to regulate their removal, whilst, on the other hand, it must be admitted that the proportion of the more valuable timber trees in the forests of these districts is small, as compared with the inferior trees in them, and undoubtedly great improvements could be effected by the felling of inferior and useless kinds, and the sowing and planting of superior ones; but works of this kind are very expensive in Assam, on account of the scarcity of manual labour, and, considering the very limited demand there is as yet for the trees in these forests, expenditure on this account would scarcely be justifiable, at least beyond making experiments, until forest receipts have considerably increased.

52. Then there is the influence which forests have on the climate and the supply of water in the streams, which in some countries demand the preparation of working plans.

53. As regards this, Assam is particularly fortunate, since both the southern part, or Surma Valley, as well as the northern part, or Brahmaputra Valley, are, comparatively speaking, narrow tracts of country, surrounded by forest-clad hills, and in many places extensive and dense tracts of forests at the foot of the hills, which, in consequence of their extreme unhealthiness, will for many generations to come remain but sparsely inhabited; so that, even in the adjoining foreign countries, the clearances are not likely to be such as will affect the rainfall or the running of springs by which streams are supplied with water.

54. The suspicions expressed occasionally, attributing the fluctuations in rainfall in different years to the clearing of forests in Assam have their origin either in the want of any observations at all, or in the superficial manner in which such observations have been conducted. Slight reflection and reference to statistics for a sufficient number of years back would show at once that the variations in rainfall in different years and the greater or less extent of clearances in this Province have no connection with each other.

Annual plans of operations.

55. Since the works carried out during the year by the Forest Department are fully described in this report, there is no necessity for stating what the plans of operations were in the different divisions, or how far it has been possible to carry them out. They were, as usual, drawn up in the first instance by Divisional Forest Officers, and submitted to the Conservator on the 1st of October, who passed orders on them according to circumstances, the urgency or otherwise, of the different works, and, most of all, according to the funds available, since there remains so very much to be done to establish a sound system of forest conservancy in Assam, that the extent of work done in one year is regulated chiefly by the latter.

Account of survey work according to divisions.

56. The following is a brief account of the survey work done in the different forest divisions.

Gáro Hills division.

57. In the Gáro Hills the survey work done consisted exclusively of the exploring, aligning, tracing, and levelling that had to be done in connection with the construction of a cart-road from Damra situated in the plains near the northern face of these hills up to Dambu, at an altitude of about 1,000 feet; the length of the road is 27 miles, and the construction of the hill portion was particularly difficult. The Conservator has inspected the work, and considers that much credit is due for it to Mr. Copeland and the native surveyor.

Goálpára division.

58. In the Goálpára division new depôt lands were demarcated and surveyed for the purpose of taking them up under the Land Acquisition Act, since the zemindars had renewed their claims of *Thaljat* on timber worked out by purchasers.

59. The demarcated boundaries of nearly all the reserves were resurveyed with a view to enter the forests correctly on the revenue survey maps, and in the Bhumeswar Hill reserve and the Panbari and Pechadaveri forests cultivated lands which are to be excluded were surveyed.

The following is a list of the different forests and the length of the lines surveyed:—

	Name of reserve.	Distance. Miles.	Chains.
1.	Panbari and Pechadaveri	0	60
2.	Ripu Duár	6	10
3.	Chirang „ western portion	7	40
4.	Chirang „ eastern portion	9	10
5.	Bengtal and Darogaon	4	70
6.	Bhumeswar Hill	4	50
7.	Depôt lands	4	50
	Total	37	50

Kámrúp division.

60. The survey work done in the Kámrúp division consisted of the newly-proposed Chhaygaon reserve, extending over an area of 3·70 square miles, the length of boundary-lines surveyed being 20 miles 52 chains.

The length of other boundary-lines surveyed was 55 miles 36 chains, which completes this work in the Kámrúp division.

Darrang and Nowgong division

61. In the Darrang and Nowgong division the survey of the new reserves in the Nowgong district commenced last year was proceeded with. There has been some delay on account of two changes of the native surveyors, one of whom was found incompetent, and the other had been continually ill. The maps of the work done are under preparation, and the Conservator hopes to be able to submit his proposals in the current year. The forests to be made reserves are the following:—

Addition to the Diju reserve.
Ditto Kholahat ditto
Ditto Deboka ditto
Rangkhang Sâl forest.
Suang ditto
Bamoni ditto
Sonai Kusi ditto

Sibságar division

62. Surveys in the following forests were made in the Sibságar division:—

	Length of line. Miles.	Chains.
In the Upper Daigurung reserve	7	6
„ Lower ditto	8	49
„ Mikir Hills ditto	39	31
„ Derai ditto (*Northern boundary*)	7	40
„ proposed Thowrah reserve	4	21
Path from Kachimari to Mahmora	3	22
Road to Mikir Hills reserve	23	74
Total	93	73

Maps of the Upper and Lower Daigurung reserves, on the scale of 4 inches to 1 mile, have been received by the Conservator, and those of the other surveys are under preparation.

Lakhimpur division.

63. The following survey work was done during the year in the Lakhimpur division:—

	Length of line. Miles.	Chains.
In the Parapara reserve	2	50
„ Upper Dihing „	19	0
„ Jaipur „	2	40
„ Titadimorn district forest	1	48
Total	25	58

Maps of these surveys are under preparation for the divisional office and that of the Conservator.

Cachar division.

64. The survey work done in the Cachar division is shown in the following statement:—

Name of reserve.	Names of adjoining estates the boundaries of which were surveyed.	Length of line surveyed. Miles.	Chains.
Lower Jiri	Alni	3	32
,, ...	Ramphan range.....	3	43
Barak	Mankhosh	1	55
,, ...	Naraindhar	1	38
,, ...	Bhubankhal.....	3	7
,, ...	Bhubandar	10	21
,, ...	Dhubpidhar.....		
,, ...	Moynadhar.....		
,, ...	The western boundary of Barak reserve from Monkhosh to Bhuban road.	8	19*
Katakhal	Loharbund and Sonarbund	5	11
,, ...	Gogla Cherra to Rupa Cherra	13	28
,, ...	Baroon range.....	2	14
Dhaleswari	Cutli Cherra.....	4	47
,, ...	Aloi Cherra.....	3	64
,, ...	Poloi Cherra	1	43
	Total.....	62	22

Maps on the scale of 4 inches to 1 mile of these surveys were received by the Conservator.

CHAPTER III.

PROTECTION AND IMPROVEMENT.

Establishments.

65. No change took place during the year in the strength of the permanent subordinate forest establishments in Assam.

66. The temporary subordinate forest establishments (a considerable proportion of which are to all intents and purposes permanent, as they have to be retained all the year round) have also remained unchanged, with this exception, that the Chief Commissioner has sanctioned an allowance to a pleader in Cachar of Rs. 10 per mensem and to another pleader in Lakhimpur of Rs. 20 per mensem.

67. The Conservator is awaiting the final gazetting of the Government reserved forests in the Sylhet and Lakhimpur districts, before submitting proposals to have the temporary establishments employed in those forests made permanent.

68. The difficulty of obtaining foresters worth having on Rs. 20 per mensem is becoming greater every day, and the Conservator has, under those circumstances, obtained the Chief Commissioner's sanction to reduce the pay of some of the appointments when opportunity offered from Rs. 40 to Rs. 30 and to increase that of others from Rs. 20 to Rs. 30 as a temporary arrangement, for the number of appointments on Rs. 40 will eventually have to be increased again, to provide reasonable prospects for deserving men of further advancement.

69. The executive and protective charges of the different forest divisions, as shown in detail in Appendix V. of last annual report, have remained unaltered, and proved generally very satisfactory and manageable.

General protection against breaches of forest law.

70. The number of prosecutions on account of forest offences is shown in Statement No. 52 attached to this report. They continue to be very few, and have fallen from 86 cases in 1883-84 to 55 in the year under report, which decrease is attributed by the Conservator chiefly to the promulgation of the District Forest Rules, and the fact that the intentions of Government, as set forh in those rules, have become better known and understood by the mauzadars and ther subordinates, and through them have also been made well known to the people, who now understand that they can have all they require from the district forests in the Asam Valley districts free of payment, and in the Surma Valley for a mere nominal sum of 8 annas a year, with the sole exception of reserved trees, so that there is very little, if any, temptation for people to commit offences against the forest law.

71. As in past years, the most cases were in the Lakhimpur district, which is accounted for by the greater demand for timber and other forest produce in that district.

72. The proportion of acquittals in the Lakhimpur division is also large, as compared with the number of convictions, which seems to indicate that not sufficient care was used in considering each case before taking action.

In the other divisions, the proportion of acquittals is less; 13 cases remained pending at the close of the year.

73. The number of persons tried was 163, whilst in the previous year there were only 152; the convictions were 109 persons, whilst 54, or about one-third of the number tried, were acquitted, which is much the same as last year.

Reference to the Tabular Statement No. 52 will show what number of prosecutions there were in the different divisions; in two of them, the Kámrúp and the Khási and Jaintia Hills divisions, there were none.

74. As in the previous year, there was not a single prosecution for grazing without permission, and, in fact, there is not the slightest necessity for villagers grazing their cattle in the reserved and protected forests, since there is an almost unlimited extent of grazing ground, much more than is required at present, outside these forests.

75. Under the other classes of forest offences, those of having caused injury to forests by fire have increased from 3 to 5, and 3 out of the 5 took place in the Goálpára forest division, where the danger from fire is greatest, on account of the licentiousness of the people.

76. In addition to the above prosecutions, 34 cases were compounded under Section 67 of the Forest Act for an aggregate amount of Rs. 431.

77. As to the nature of the different offences, this was much the same as in previous years, with the exception of illegal tapping of rubber in the Darrang district. This used to give a great deal of trouble formerly, but has in the year under notice become easily manageable, in consequence of the interest taken by the Deputy-Commissioner in this matter, and the support he has given to the Forest Officer by the issue of different orders facilitating the control over the rubber-trade, such as allowing the men who go into foreign territory only to travel by one or two specified roads, and giving passes to cross the frontier for the purpose of collecting rubber only to respectable persons. The people who hold the rubber-mahál in the Darrang district, and pay Rs. 22,100 per annum for it, also appointed a European Superintendent, who kept the workmen in order. Not less than 1,013 passes were issued to men to go into foreign territory for the purpose of collecting rubber.

Forest fires

78. The protection of the Government forests against fire has been successful during the year under notice, in spite of the season up to the beginning of April having again been most exceptionally dry; no rain to speak of fell in Lower Assam from November until April, which made this work particularly difficult, since in ordinary years there is always a good fall of rain about the end of December.

79. The following statement shows the rainfall in the districts where fire protection is carried out during the five months November to March since 1880-81:—

Name of district.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.
Goálpára	4·40	3·02	·60	6·10	4·76
Kámrúp	7·20	5·62	1·99	4·35	3·26
Darrang	6·61	7·66	2·79	7·67	2·72
Nowgong	5·02	7·00	4·69	4·10	3·69
Khási and Jaintia Hills	6·10	4·29	3·08	3·93	3·44

80. Reference to the Tabular Statement No. 51, attached to this report, will show that the forest area which it was attempted to protect against fire during the year under report was 134,224 acres as compared with 134,039 acres in 1883-84, and the area successfully protected this year was 127,091 acres, as compared with 94,914 in the year before. The expenditure on this work during the season under notice was Rs. 10,302, whilst it was Rs. 9,486 in the year previous.

81. The proportion of failures to area attempted in percentage, as compared with the previous year, was as follows:—

	Proportion of failures to area attempted in percentage.	
	1883-84.	1884-85.
Goálpára division	64·32	2·51
Kámrúp "	11·09	10·09
Darrang and Nowgong division	0·20	1·37
Khási and Jaintia Hills "	0·41	·63

This shows a great improvement in the fire protection of the Goálpára division, which the Conservator attributes chiefly to the personal exertion of the Divisional Forest Officer, Babu Jogesvar Sur, who, in accordance with the instructions he had received, has during the season continually visited all the villages in the neighbourhood of the forests the

protection of which was carried on, to warn the people. He was also very successful in arresting people, who, as in former years, recklessly and maliciously set fire to the forests.

82. In the Kámrúp division the percentage is about the same as in the previous year. Mr. Jellicoe has attempted to protect 14 small forests in the Singra range by merely burning the surrounding grass lands with the ordinary forest guards, without incurring any extra expenditure, and the percentage of failures has consequently been very large in those forests.

83. In the Darrang and Nowgong division the percentage of failures is higher on account of the burning of 320 acres in the Khalingduár forest, where two fires occurred, one being lighted by Bhutias when returning to their hills, who were not arrested, and the second by five coolies from an adjoining tea estate, who were prosecuted and sentenced to two months' imprisonment each.

84. The following tabular statement shows the expenditure, as compared with previous years, as well as the area attempted, and actually protected according to divisions:—

	Increase in expenditure, as compared with previous year.	Increase in area attempted to be protected in acres.	Increase in area actually protected in acres.	Decrease in area actually protected in acres.
	Rs.			
Goálpára division	.....	.....	31,724	.....
Kámrúp „	1,130	226	743	.....
Darrang and Nowgong division	.....	.....	.....	280
Khási and Jaintia Hills „	100	.....	.....	10
Total.....	1,230	226	32,467	290

85. The cost of fire-protection per acre successfully protected in the different divisions, as compared with that in the previous year, was as follows:—

	1883-84.			1884-85.		
	Rs.	A.	P.	Rs.	A.	P.
Goálpára division	0	3	6	0	1	2
Kámrúp „	0	0	11	0	1	3
Darrang and Nowgong division	0	0	7	0	0	7
Khási and Jaintia Hills „	0	6	3	0	6	7
Average for the whole Province	0	1	7	0	1	3

This is less than in previous years on account of the greater area successfully protected, although the total expenditure on this work during the season under notice was Rs. 816 more than in the previous year. Cheap fire-protection in Assam cannot be hoped for until a larger proportion of the enormous areas of waste land, covered with rank grass, in which in many places an elephant cannot be seen, has been brought under cultivation. Where the latter prevails alongside the forest, the cost is at once much less than in localities where this is not the case.

86. The area of reserved forests, which, as a rule, does not burn in Assam, and, therefore, requires no special measures to protect it against fire, is as follows:—

	Square miles.
In the Darrang and Nowgong division	265
„ Sibságar „ „	580
„ Cachar „ „	745
„ Khási and Jaintia Hills division.....	50
Total.....	1,640

In all the other divisions fires either do not occur at all, or only occasionally, on patches of grass land included in or adjoining the reserves; but, from the nature of the forests and the excessive moisture of the atmosphere, they do no appreciable harm.

Account of fire-protection according to divisions.

87. The following is a detailed amount of fire-protection as carried out during the season in the different forest divisions.

Goálpára division

88. The forests which were protected against fire in the Goálpára division are the same as those protected in previous years, amounting to 51,350 acres. No regular fire-protection has as yet been commenced in the Chirangduár reserve, because it is, the Conservator thinks, not advisable to extend this work over a larger area until more complete success for several years is attained in those forests the protection of which has been carried on up to now.

89. In the Sidli reserve the special measures of protection were commenced in October, and completed by the end of December. They consisted in the clearing of 30 miles of external fire-lines, 300 feet wide, 9 miles of road, with 100 feet clearances on either side, 8 miles of block lines 200 feet wide, and 4 miles of lines of the same width around cultivation.

90. No attempt was made this year to clear the compartment lines in this forest but the whole area was divided into four blocks for fire-protection, and a head fire-guard placed in charge of each, and 9 patrolling stations about 2 to 3 miles from each other were established, with two fire-guards at each, also two stations, one on either end of the cart-road leading through the forest.

91. The Sidli reserve was altogether five times set on fire. In three cases it was extinguished soon, and did little or no harm, whilst the two others were more serious, one burning about 150 acres in the Bansbari block, on the 16th February, and the other in the same block, and two different places, compartments 2 and 5, on the 14th March, when about 1,000 acres were burned.

92. In the former case two men set fire for the purpose of being able to collect *ekra*, or reeds (used for making the walls of huts), more conveniently, *i.e.*, to save themselves the trouble of having to search for the best sticks, and to strip off the leaves. This method of burning the jungle first before cutting the *ekra* is followed everywhere, and is the cause of most fires in the Province. The men were caught, prosecuted, and sentenced to three months' rigorous imprisonment each.

93. In the second case 18 men of Amguri village had set fire to the reserve. They came the next day to hunt on the part burned, and were arrested, but would not confess. They agreed, however, to compound the offence under Section 67 of the Forest Act by paying Rs 20 each.

94. Of another eight men who set fire to the Sidli reserve, two were fined Rs. 100 each, and six men imprisoned for three months each, which has brought about a change for the better, and justifies the Divisional Officer in hoping that former recklessness in burning the Government reserved forests will not continue to the same extent as has been the case hitherto.

95. The clearing of fire-lines in the Guma reserve was also begun in October, and completed by the middle of December. It consisted of 24 miles of external fire-lines, 300 feet in width, 6·5 miles of road with 100-feet clearances on either side, 3·25 miles of block line 200 feet wide, and 11·25 miles of compartment-lines 20 feet wide. The old Chakma pathway was also cleared to facilitate communication In addition to this, grass lands in compartments Nos. 21, 26, and 27, were burned off. All the work in this forest had to be done by imported labour.

96. After the lines had been cleared the Guma reserve was divided into three blocks for fire-conservancy purposes, and a head fire-guard placed in charge of each, and nine patrolling stations with fire-guards at each were established to watch over the forest.

97. The cost of fire-protection in the Sidli reserve was Rs. 2,107, and in the Guma reserve Rs. 1,420. The proportion of this paid for fire-guards and such as was paid for clearing of fire-lines, the construction of huts, and as rewards in each forest has been as follows:—

Particulars.	Sidli reserve.	Guma reserve.
	Rs.	Rs.
Cost of fire-conservancy establishments.....	526	370
Clearing of fire-lines and building of huts	1,551	1,050
Rewards	30	.....
Total.....	2,107	1,420

This is Rs. 59 per square mile in the Guma reserve, as compared with Rs 98 in the previous year, and Rs. 42 per square mile in the Sidli reserve, as compared with Rs. 29 in 1883-84.

98. The decrease in the Guma reserve is satisfactory; the increase in the Sidli reserve is not so. The Divisional Officer has explained that this increase is due mainly to the increased number of fire-guards entertained this year, which was probably unavoidable, to put a stop to the recklessness which had prevailed amongst the villagers in the neighbourhood up to date, but efforts will have to be made to reduce this cost again.

99. In the proposed Panbari and Pechadaveri reserve Rs. 134 were spent, which is a slight increase on the expenditure on fire-protection in this forest last year, when it had been Rs. 125.

Kámrúp division

100. The total area of forests which it was attempted to protect in the Kámrúp division during the year under report is 54,306 acres, as compared with 54,080 acres in the previous year, showing an increase of 226 acres, and the failures came to 5,483 acres, as compared with 6,000 acres last year, which, although there is room for improvement, is fairly successful when the great difficulties the Divisional Officer has to contend with are taken into consideration.

The Tabular Statement No. 51 attached to this report gives the names of the forests and other details regarding this work.

101. The weak point in fire-protection in Kámrúp evidently was, that in the Singra range, for the sake of economy, no special measures were adopted to ensure success, and in the Rani reserve, that the southern boundary towards the Khási Hills was not completely burned clear, and natural protection in the way of deep gorges and other moist tracts were too much relied upon. This will have to be guarded against in future.

102. An attempt was made this year for the first time to protect the small Hajo reserve, but was not successful, the fire having got into it from the adjoining district forests, and could not be got under.

103. The total cost of fire-protection work in the Kámrúp division was Rs. 3,860, as compared with Rs. 2,730 in the previons year, or Rs. 45 per mile, as compared with Rs. 32 last year.

The proportion of this expenditure which was incurred on account of fire-conservancy establishments and on the clearing of fire-lines was the following:—

			Rs.
Cost of fire-conservancy establishment	...	...	968
Clearing of fire-lines, &c., &c. ...	...	...	2,892
	Total	...	3,860

104. The cultivation of lands adjoining the forest was encouraged as an additional safeguard against fire, as in former years, with satisfactory results, 55·14 acres having been leased for a total rent of Rs. 82·5, and 59·62 acres altogether free of rent.

Darrang and Nowgong division.

105. The forest area which it was attempted in the Darrang and Nowgong division to protect against fire was 37·48 square miles, which is the same as in the previous year.

The proposed Suang and Bamoni forest reserves had some small amounts, Rs. 20·13 in the former and Rs. 5·10 in the latter, expended by the survey party, to keep the fires out, which latter were raging around them, and their efforts have been successful; but it cannot be said that a regular or systematic attempt was made to protect these forests against fires.

With the exception of the Khalingduár reserve, already referred to in paragraph 83 of this report, fire-protection has been completely successful, as shown in the Tabular Statement No. 51, attached to this report.

106. The expenditure on this work during the year under report in this division has been as follows : —

	Darrang. Rs.	Nowgong. Rs.
Fire-conservancy establishments	84	128
Clearing of fire-lines	244	442
Total	328	570

This is Rs. 11 per square mile actually protected in th Darrang district, as compared with Rs. 9 in the previous year, and about Rs. 71 per square mile in the Nowgong district, as compared with Rs. 84 last year.

The latter decrease in the Nowgong district is satisfactory, yet even the rate of Rs. 71 is very high. The fact of the forest areas in this district being small, and their

boundaries winding and irregular, accounts to some extent for this; but further reduction in the rate will, no doubt, be found practicable by the careful burning of the grass lands surrounding the reserves, without previous cutting.

Khási and Jaintia Hills division.

107. The forests in the Khási and Jaintia Hills division, which are protected against fire, are the Pine forests on the Shillong estate and the Riat-khwan forests (also Pine) situated at a short distance from Shillong on either side of the cart-road and bridle-path leading to the Umiam river.

108. The area which it was attempted to protect is 4,578 acres, and its protection has been successful, with the exception of a small area of 23 acres, which was burned early in the season. It consisted of grass lands only, without trees, on the banks of the Umiam river. The fire, it is supposed, was lighted by men who were fishing in the river; but, on account of the difficult nature of the ground, the forest guards did not succeed in arresting them; and when the latter was done the next day, they denied the charge, and sufficient evidence could not be produced to have them convicted.

109. Besides this, fires were mischievously lit in two other places in the forests on the Shillong estate, once near the Jowai road and the other near the Nongkrem road. They were, however, put out almost immediately by the fire-guards, and no damage done.

The difficulty of detecting men setting fire to the forests in this division is very great, on account of the hilly nature of the ground, as will be evident from the fact that fires were lighted out of mischief not less than six times in the station of Shillong by a small boy, who was only caught after the inhabitants had been repeatedly alarmed by night and day, on account of the imminent danger their houses and other property were placed in by this young miscreant, who took a delight in watching the anxiety caused by his misdeeds.

110. The expenditure on fire-protection work in the Khási and Jaintia Hills division was Rs. 1,376 on the Shillong estate, as compared with Rs. 960 in the previous year, and Rs. 507 for the Riatkhwan forest, as compared with Rs. 823 the year before.

The increased cost of this work on the Shillong estate is due to the employment of more prison and less free labour than in former years.

Natural reproduction.

111. The forests in Assam, as regards their value, may be divided into two groups, *viz.*, the Sâl forests and other forests. The former, partly on account of the intrinsic value of the Sâl timber, and equally so on account of the gregarious habits of the Sâl-tree, are by far the most important, and on account of this, and of the fact that they exist in lower Assam, or, in other words, nearer the general market than the other forests, have been heavily worked, but the power of reproducing itself in this tree is very great, so that the removal of the parent trees has been followed by an abundance of seedlings, which grow all the more vigorously in consequence of the air and light admitted, and the protection of the forests against fire.

112. In the other forests, which consist of a great variety of trees, many kinds are valuable; but the majority of them are not, *i.e.*, the timber has not such intrinsic value as would enable it to compete successfully with other kinds in the general market.

113. Against the extraction of the more valuable trees to the full extent, as these latter forests produce them, in the valley districts, is at present the prejudice timber traders who export have against almost every kind but Sâl; but, besides this, the country is not sufficiently opened out to offer facilities for the export of timber from upper Assam, so that there is more of these woods in the forests than what there is a demand for, and therefore the question of natural reproduction need not cause anxiety, particularly not so, since there is a fair and increasing local demand for the inferior kinds of wood for tea-boxes, which prevents these taking possession of the ground to the exclusion of the better kinds. The removal of the inferior trees is as yet also much below the productiveness of the forests, and their natural regeneration, the Conservator has no doubt, will always keep pace with their removal, even though they all be felled as soon as they reach maturity, because their powers of reproduction are prodigious, and the climate and soil of Assam such as facilitate it to the utmost.

114. In Cachar and Sylhet, on the contrary, the superior kinds have been worked out very extensively, as there has always been a large timber trade carried on, even before Cachar was annexed, and until the Forest Department undertook the management of these forests, the tax on all kinds, with the only exception of Jarul (*Lagerstrœmia Reginæ*), was the same, so that very naturally the timber-cutters removed larger quantities of the better kinds.

At present, however, the tax on these is three and four times as high as that on the inferior woods, whilst the demand for the latter for the manufacture of tea-boxes has very largely increased, so that there is no fear now of the inferior trees taking possession of the ground to the exclusion of the better kinds, and the favourable conditions for regeneration exist here as well as in the Assam Valley districts, whereby the maintenance of the forests in Cachar and Sylhet is ensured. In the forests, also, the demand does not exceed their productiveness.

115. From the above remarks it will be understood that there is at present no danger of the forests in Assam being overworked, but that, on the contrary, we want the country to be more opened out and trade to be developed so as to ensure the more extensive removal of trees.

Artificial reproduction.

116. Plantation work in this Province is, with the exception of the cultivation of Rubber-trees, only experimental. This is in accordance with the special wish of the Chief Commissioner and the orders of the Government of India.

117. The extensions made during the year were 146 acres of Caoutchouc or Rubber-trees, 26 acres of which were planted in the Kámrúp division, and 120 acres in the Darrang and Nowgong division. The cultural operations in the Nambor forest were increased by 28 acres. The Tabular Statement No. 50, attached to this report, shows the total areas of the different plantations, as well as the total expenditure which has been incurred on them up to the end of the year under report.

Besides this, Rs. 1,305 have been spent on the raising of *Cinchona succirubra* at Tura in the Gáro Hills; but this has not as yet advanced beyond the stage of nursery work.

Account of plantation work according to divisions.

118. A more detailed account of plantation work as to the success or failure of the different species and their growth in the old plantations during the year according to divisions is given below.

Kámrúp division.

119. The plantations at the Kulsi in the Kámrúp district are, so to speak, all experimental. It is true the cultivation of Rubber-trees is now thoroughly understood; but, on the other hand, it is not intended to have extensive Rubber plantations in this locality, and the small area of 26 acres by which they have been increased this year, was planted chiefly to make use of some small pieces of land not suited for the cultivation of other trees, and partly also with a view to keeping the fire out of the older teak plantations.

120. The measurements of trees and the expenditure incurred on the different works as well as the rainfall at the Kulsi plantation have been given, as in former years, in a plantation memorandum, which is attached to this report as Appendix III.

121. The Rubber-trees continue to do well, and are growing luxuriantly; but as no forest of high trees is standing between the lines of Rubber-trees at the Kulsi plantation, as is the case at the Charduár, the trees have an inclination to spread out, rather than to grow rapidly in height. They are, however, sure to do the latter also as time goes on, and it is as yet an open question whether great height will be an advantage in Rubber-trees.

The Poma (*Cedrela Toona*) sown and planted between the lines of Rubber-trees, continues to do well.

122. The growth of the Teak-trees in the different plantations continues very satisfactory. All the trees are healthy, and even the plantation of 1875 begins to close somewhat overhead. There can be no doubt that the latter plantation would have done better, if some of the inferior trees which stood on the hill when the plantation was started had been left standing to give shade to the young Teak-seedlings, instead of the entire clearing which was made.

The seedlings of Sam (*Artocarpus Chaplasha*), with which the Teak was interplanted last year, are reported by the Divisional Officer at the end of the dry season to be very healthy and thriving. More of the seed has been sown at planting spots in this plantation, wherever vacancies existed amongst the Teak-trees.

The Sissu and Khair-trees interplanted amongst the Teak of 1881 are also doing well, the average height of the former being 15 feet and that of the latter 8 feet.

123. In the Sissu plantation, Ajhar was sown and planted in 91 lines, each 4 feet in width, and of an average length of 267 feet. The young trees are doing well, but are as yet too small to be measured. The size of the Sissu and Poma-trees in this plantation is given in Appendix III. The expenditure during the year was incurred to keep the high grass down, that it might not interfere with the growth of the young Ajhar-trees.

124. No additions were made to the exotic trees cultivated at the Kulsi plantation and the growth of those planted in former years continues much the same as before.

The Ceara Rubber-trees are doing fairly well, but several of the finest trees have been much broken by the wind, showing that they ought either to be planted in sheltered situations or to be protected by planting other trees with them, such as can stand the wind better. There are now 145 trees growing in the plantation, irrespective of seedlings. The largest tree measures 45 feet in height.

Of the Mahogany-trees there are only 5 left. The Assam climate is not suited for their growth, and they are sure to die all before growing to any size. The average height of the trees alive is 8 feet.

There are 448 *Pithecolobium*-trees at the Kulsi plantation; they continue to thrive, but have still the lanky, crooked, and ill-grown appearance as formerly.

The two trees of Maipak are doing well, and measure now 32 and 34 feet respectively, so that they may be expected to flower soon. There is no doubt some confusion about the botanical name of this tree, which seems to have originated in a sketch of flowers made by Mr. Peel of an *Evodia*, which was sent to the Conservator as a sketch of the flowers of the Maipak-tree.

The Phillipine plantains (*Musa textiles*) are thriving better than formerly, but yet their growth is very slow. It is quite evident that Assam is not the country for this plant; it requires a hotter climate.

The Paper Mulberry (*Broussonetia papyrifera*) is doing remarkably well at the Kulsi plantation, and has borne plenty of seed. It has also been propagated by root-suckers. There are now 183 trees of an average height of 21 feet and average girth of 10 inches and 90 smaller plants, obtained from root-suckers, of an average height of 8 feet.

The Cinchona-trees of Jirang are approaching the natural term of their existence, they are 18 years old, and have often been barked more or less by passers-by going along the Jirang road. They have served the purpose for which they were planted, *i.e.*, to ascertain if Cinchona will grow in the Khási Hills, which they undoubtedly will. The species growing at Jirang, elevation 2,400 feet, is *Cinchona succirubra*, and there is a plant of the same species growing at Shillong, elevation 5,000 feet, planted about the same time, 18 years ago, which is also looking healthy, although dwarf in appearance, and only about 3 feet in height. It would be an advantage if Cinchona could be grown in the plains of Assam, where tea is cultivated most advantageously, as it might then be planted in tea-gardens without extra expense. Experiments are now being made at the Kulsi plantation about this.

Darrang and Nowgong division.

125. The Charduár Caoutchouc or Rubber plantation in the Darrang district has been extended by 120 acres. The difficulty of obtaining labour, in consequence of the Aka raid last year, still exists to some extent, and prevented the Divisional Officer from planting 200 acres, as had been ordered. This extension brings the total area of the plantation up to 1,012 acres.

Of the experimental Rubber plantation on the Bamuni Hill near Tezpur, one acre has been abandoned, leaving 8 acres fully stocked with trees.

126. Besides this, there are the 30 acres at the Charduár plantation, on which young Rubber-seedlings were planted last year in the forks of trees. An additional 166 seedlings were planted out during the year under report, partly to replace such as had died, and partly to increase the number of plants on this area. As frequently stated before, these seedlings, planted in the forks of trees, make extremely little growth for a number of years, in fact, not until their aërial roots reach the ground, and this does not happen as a rule until they are about five years old, or even later.

These 30 acres have not as yet been entered in the area statement of plantations, No. 50, attached to this report, because the existence of these plants is a very precarious one: this will be done whenever the plants are properly established. The expenditure incurred on this work up to the end of the year under report has been Rs. 109, which is included in the expenditure shown against the Charduár plantation generally.

127. Appendix IV. of this report gives the measurements of trees, the expenditure incurred on the different works, and the rainfall at the Charduár plantation.

The growth of the trees has been very good all round. There are a few spots on which, on account of the inferiority of the soil, or for the want of protecting trees or nurses, the growth has not been quite so good as elsewhere; but these places are of very small extent, and do not affect the general state of the plantation, which is excellent, and a great credit to the Divisional Officer, Mr. T. J. Campbell.

128. The following is an abstract of the measurements given in Appendix IV., showing the number of trees of different sizes, as compared with the two previous years, which will illustrate the good growth made by them:—

	1882-83.	1883-84.	1884-85.
Trees 5 to 10 feet high	1,864	359	.....
„ 10 „ 15 „	6,565	6,383	3,428
„ 15 „ 20 „	2,543	5,137	5,481
„ 20 „ 25 „	939	1,427	3,188
„ 25 „ 30 „	279	467	1,091
„ 30 „ 35 „	123	139	407
„ 35 „ 40 „	64	48	164
„ 40 „ 45 „	21	20	52
„ 45 „ 50 „	3	1	19

129. The number of trees planted during the year to fill up vacancies, or to replace weakly trees in the old plantation, was 770, as compared with 1,356 trees planted in the previous year.

The trees on the new extension of 120 acres have not been shown in Appendix IV., as they have not established themselves, and, in fact, have made no growth since transferred from the nurseries into the plantation.

130. Increased attention has also been paid to the sowing and planting of indigenous timber-trees in the lines between the Rubber-trees, such as Ajhar, Amari, Sam, Poma, Gunserai, and Nahor, and is reported to have been very successful.

131. The condition of the plants in the nurseries is shown in Appendix IV. They are almost without exception very vigorous. It is estimated that a hundred thousand are ready for planting out; they would suffice to plant some 6,000 acres.

132. The rainfall during the year at the Charduár plantation was 71·11 inches, which is less than in any previous year since the plantation was started in 1874-75.

133. The total expenditure during the year under report on this plantation, including the extension of 120 acres, has been Rs. 4,722, as compared with Rs. 4,742 in the previous year, and Rs. 7,597 in 1882-83, which is very satisfactory, and shows the careful management of the plantation. Much of the high expenditure in former years was, of course, due to the experimental nature of the work, which has now ceased, or very nearly so. The keeping up of a fence constituted the main part of that exceptional expenditure. No fence is now being kept up, except for nurseries.

134. The heaviest item was, as heretofore, the keeping down of the undergrowth in the lines, repairs to mounds, and replacing of stakes; but it is also in this work that the chief reduction has been effected by the careful and judicious increase of tasks for day labourers.

135. An exceptional item of expenditure in the year under report was the protection of the plantation against further encroachment by the Mansiri river, which came to about Rs. 128.

136. The growth of the trees in the Bamuni Hill caoutchouc plantation has also been satisfactory. The following table shows the countings and measurements of them in the last three years:—

	1882-83.	1883-84.	1884-85.
Trees 5 to 10 feet high	174	41	13
„ 10 „ 15 „	216	145	137
„ 15 „ 20 „	215	294	333
„ 20 „ 25 „	146	257	221
„ 25 „ 30 „	35	59	83
„ 30 „ 35 „	.....	4	12

The expenditure on this plantation during the year was very trifling; it came to Rs. 10-2 only.

137. The area planted with the better kinds of timber trees in the Nambor forest has been increased by 28 acres, making the total area 101 acres. They were chiefly sown or planted with Ajhar (*Lagerstrœmia Reginæ*), but also to some extent with Poma (*Cedrela Toona*). The latter has succeeded equally well as Ajhar and Nahor.

Sibságar division.

138. The area is, if anything, overstocked, and some changes in the system are necessary to improve larger areas for the same money. The chief expense is the clearing away of useless trees to admit light and air for those newly sown or planted. This is an operation requiring some skill, because, if overdone, the undergrowth springs up so

luxuriantly and dense that it will not allow small seedlings to get the better of it. To counterbalance this, seedlings, or rather saplings, should be grown in nurseries to a larger size before transplanting, when a smaller number will suffice fully to stock the area. Local labour in the Nambor forest continues to be very scarce, and is accordingly expensive. There seem to be no prospects of improvement in this respect, since the demand for it is increasing.

The total expenditure on this work during the year under report was Rs. 1,460, as compared with Rs. 1,405 in the previous year.

Lakhimpur division

139. The Teak-trees at Makum are much the same as before. The average height of the 20 dominant trees, measured last year, is reported by the Divisional Officer to be now 56 feet by an average girth of 2·6 feet, as compared with a height of 52 feet and girth of 2 3 feet last year.

No expenditure was incurred, as the trees are quite large enough to hold their own amongst the indigenous vegetation.

Khasi and Jaintia Hills division

140. In the Khási Hills the chief work in the way of planting has been, as in former years, the filling up of blanks in the Riatkhwan forest, and on the different areas appertaining to the Shillong estate, principally taken up to secure the water-supply for the station. There are no regular plantations, but only nurseries. The 8 acres, entered in the Tabular Statement No. 50, do not represent all that has been done in the way of planting and sowing trees for the Rs. 3,765, or anything like it, and as the blanks filled up from time to time are very irregular in shape and require in some places very little and in others a complete planting, no attempt has been made to show their areas in Statement No. 50. Under these circumstances, it seems to be better to leave the area column in the Khási Hills blank, as it can only mislead, and this has accordingly been done.

141. The growth of the different species of Eucalyptus and the Kakra plants (*Pistacia integerrima*) has not been more encouraging than in previous years.

The plants of the Paper Mulberry are healthy and thriving, but their growth is nothing like so vigorous as at the Kulsi plantation.

Cutting of climbers

142. The cutting of climbers was carried out in the Sâl forests of the Goálpára and the plantations in the Kámrúp division. The area gone over in the former was 9 square miles in the Guma reserve at a total cost of Rs 388, and in the Kámrúp division the total expenditure on account of this work came to Rs. 131

143. The officer in charge of the Darrang and Nowgong division reports that no more of climber-cutting is required in the Sâl forests in Darrang for the present; but that the forests which it is proposed to reserve in the Nowgong district are very much infested by them, and will require early attention.

Communications and buildings

144. Very good progress has been made in the construction of roads in those divisions where forest work cannot be carried on without them. The chief work done was that of constructing a cart-road to work the Dambu forest in the Gáro Hills, on account of which the total expenditure under this head in the Province has been as much as Rs. 12,953, whilst Rs. 5,779 only were spent in the previous year. For buildings, on the contrary, about Rs. 4,000 less have been spent, as the purchase of the Forest Officer's bungalow in Gauháti made the expenditure exceptionally high in 1883-84; still, much was done during the year under report in the way of erecting small buildings, such as inspection huts, in the forests to provide shelter for forest officials of all grades. The expenditure under the head of Buildings in the year under report was Rs. 10,873, as compared with Rs. 14,835 in 1883-84.

Account of road work according to divisions
Gáro Hills division

145. In the Gáro Hills division, as already stated, much has been done in the way of road-making, the chief of which was the widening out for carts of the road commenced last year from Damra-Hát in the Goálpára district to the Dambu forest in the Gáro Hills, at an altitude of about 1,000 feet.

This road will not only be of use for forest work, but it will also make one of the richest parts of the Gáro Hills accessible for carts, which must necessarily stimulate the general development of the resources of that country.

By the close of the year under report this road was passable for carts up to the Gabul school-house, a distance of about 21 miles, on which distance there are not less than 51 bridges; the funds for that portion of the road between the Damra-Hát and the Gáro Hills boundary, about 2 miles, were supplied by the Goálpára Local Board. The total expenditure from Forest Department funds on this road during the year came to

Rs. 5,911, besides which Rs. 439 were spent on inspection and other small paths to connect the forests with the district roads.

Goálpára division

146. No roads were made in the Goálpára division, as they would cost as much to keep open, and more, than to make, and thus be an unnecessary burden to the department, as the requirements do not justify such an expenditure, inasmuch as all forests can be reached by existing paths, or, where there are none, by means of elephants. The district road newly constructed is of great use to forest officials, and, as it makes most of the reserves more accessible, the timber for the bridges has in the year under notice been supplied free of royalty, as formerly.

Kámróp division.

147. Existing roads in and near the Government reserved forests in the Kámrúp division were repaired and improved, particularly so the bridges, a number of which were made fit for elephants to travel over, since, in the rains, the unloading and swimming of these animals across streams, sometimes not much bigger than their bodies, is very vexatious, and causes much delay and loss of time.

The total expenditure on road work in the Kámrúp division was as follows:—

	Rs.	As.	P.
Bridge work	734	0	4
Earthwork	423	10	11
Clearing jungle	192	12	9
Dressing	66	1	0
Miscellaneous	146	0	0
Total ...	1,562	9	0

Darrang and Nowgong division

148. In the Darrang and Nowgong division great attention has been paid to the improvement of the roads. The one leading to the police-outposts at Dijumukh and Bhalukpung, opened out during the Aka Expedition, was placed by the Chief Commissioner in charge of the Forest Department, and thoroughly repaired from forest funds.

The Phatasali road, leading through the Bálipára Sâl forest to the Bhairabi river, where the latter is usually crossed by the Daflas when coming to this part of the Darrang district, was much improved, and is reported by the Divisional Officer to have greatly facilitated fire-protection.

The Dhekrigaon road was raised, and widened by the throwing up of about 169,500 cubic feet of earth.

In consequence of the great rush of water there is at the time of floods through the bridges on this road, their position has to be changed every third or fourth year. Five bridges were closed in this way during the year, and two new ones and a culvert constructed in their stead in new places.

Out of the total expenditure of Rs. 1,021, the Local Board gave Rs. 500 for this work.

The road running along the southern boundary of the Charduar reserve has also been much improved, as the extensions of the Rubber plantation are to be made in that locality, and require improved communication. The swampy portions of this line were paved with logs of wood, to make sure of their being passable in the rainy season. There were also eight new bridges constructed on this road. The bridle-path leading from the Charduár Rubber plantation to the Bálipára Sâl forest was improved.

The total expenditure from forest funds in the Darrang and Nowgong division has been as follows:—

		Rs.	A.
Dhekrigaon	road	521	0
South Charduár	"	519	3
Phatasali	"	125	0
Bhalukpung	"	195	15
Plantation	"	19	4
Bridle-paths	"	8	12
Miscellaneous	"	30	0
Total ...	...	1,419	2

The above work was wholly confined to the Darrang district, since no forest roads are required for the present in the Nowgong district.

149. The 50 miles of old roads in the Nambor forest were kept in good repair during the year, and, in addition to this, the path connecting this forest with the Daigurung and Mikir Hills reserves was carried 12 miles further, and generally improved. This makes the total length of the latter about 62 miles, Much remains, however, to be done to this before it can be reported as altogether fit for riding. The expenditure on the above roads, which comprise all the forest roads in the Golághát range, has been Rs. 675 during the year.

Sibságar division

150 In the Jorhát range the road connecting the Holongaoar reserve with the Dhudar Ali district road was kept in repair at a cost of Rs. 84.

In the Sibságar range the Horiohuter Ali, leading from the Dhudar Ali district road to the Sola reserve, was made passable for ponies by the end of the year; the path from Kachimari Pathar to the Mahmora path at the Dirai reserve, has also been improved, though it is not as yet fit for riding. The expenditure on road work in this range during the year was Rs. 159.

151. In the Lakhimpur division the road, connecting the Dehingmukh reserve with the district road has been made passable for ponies in the dry season; its length is about four miles.

Lakhimpur division

Another path in the Upper Dehing reserve from the railway line near Borbil to the Dibru river, and from there through the village of Kharjan to the Dehing river, a distance of about 14 miles, was cleared and made passable for ponies. The cost of this work has been charged to demarcation.

152. In the Cachar division, work was chiefly concentrated on the path through the Katakhal reserve, a distance of about 22 miles, which was cleared throughout, and on the hilly portions the gradients improved. The expenditure on this work during the year was Rs. 2,030.

Cachar division

Besides this, Rs. 144 were spent on preliminary surveys to select the best ground for a road through the Upper Jiri reserve, and Rs. 218 on roads in the Barak reserve. Various smaller amounts were expended on repairs of the road in the Dhaleswari reserve, and other minor patrolling paths.

The total expenditure on road work during the year in the Cachar division has been Rs. 2,703.

153. The Divisional Forest Officer's bungalow at Tura was all but finished during the year; a heavy storm, which occurred whilst the iron was being put on the roof, caused some damage and also delay, because new iron sheets had to be obtained from Calcutta.

Account of buildings according to divisions
Gáro Hills division

At Damra, the head-quarters of the northern range, the wood-work or frame of a new inspection hut was put up, and all existing smaller buildings in the division were repaired.

The total expenditure on buildings in the Gáro Hills division during the year was Rs. 2,623.

154. In the Goálpára division, little more than the repairs to existing buildings was done. At Gosaigaon, a small inspection hut was erected to give shelter to forest officials of all grades when attending to work in the western part of the Guma reserve, and three other small rest-houses were built for forest subordinates at places where they are stationed to afford the requisite shelter.

Goalpára division

The total expenditure in the Goálpára division on building was Rs. 992.

155. In the Kámrúp division, the Forest Officer's bungalow at Gauháti was repaired, and so were the inspection huts at Kukurmara, Borbokra, and Rajapara. At the Kulsi plantation a new office was built for the forest-ranger, and the repairs of other huts for subordinates and labourers were attended to.

Kámrúp division

The total expenditure in the Kámrúp division on buildings during the year under report came to Rs. 1,207.

156. In the Darrang and Nowgong division, existing buildings were repaired, and a good many of the minor structures for subordinates and labourers had to be renewed.

Darrang and Nowgong division

But very little had been spent for some years past on this account, which made the cost in the year under report somewhat high. It was Rs. 1,533 in the Darrang and Rs. 53 in the Nowgong district.

157. With the exception of a new inspection hut at Kachimari, all the work done in the Sibságar division consisted in repairs. In Golághát the Forest Officer's bungalow and out-houses were newly thatched and the same had to be done to the office at Sibságar.

Sibságar division

The total expenditure on account of buildings in the Sibságar division during the year was Rs. 598.

Lakhimpur division.

158. In the Lakhimpur division the Forest Officer's bungalow at Dibrugarh was completed by the Department Public Works from funds supplied by the Forest Department.

In addition to this, three new inspection huts were built in the Upper Dehing proposed reserve, which is by far the largest and most important forest in the district. One of these was erected at Margherita on the Dehing river, one at Borbil on the railway, line, and, so to speak, in the centre of this forest, and one at the junction of the Dumduma and Makum line, so that the necessary shelter is now provided for the Divisional Officer and his subordinates.

Besides the above, inspection huts were provided at North Lakhimpur and Sadiya at Rs. 150 each, and huts for forest guards at eight different places on as many different beats. All the existing buildings were repaired where necessary.

The total expenditure on account of buildings in the Lakhimpur division during the year under report amounted to Rs. 1,634.

Cachar division.

159. In the Cachar division a new inspection hut was erected at Bhubankhalmukh in the Barak reserve at a cost of Rs. 660, and 7 smaller buildings for subordinates were put up in different parts of the district at an aggregate cost of Rs. 168.

The repairs to existing buildings in the Cachar division during the year came to Rs. 925.

Sylhet division

160. In the Sylhet division 8 small huts were put up for the higher subordinates and forest guards at an aggregate cost of Rs. 220.

Khási and Jaintia Hills division.

161. No new buildings were constructed in the Khási and Jaintia Hills division, but the repairs to existing ones came to Rs. 318 during the year.

CHAPTER IV.

Yield and Working.

Departmental operations.

162. The small number of trees, 129, for the whole Province, felled by direct departmental agency, was used by the department for buildings and bridges, and not sold. No timber is worked out any longer for sale by the Forest Department in this province. The prescribed tabular statement, No. 64, is not appended to this report, since no timber worked out by this department was supplied to any other public department.

163. Besides the trees felled, there is the confiscated timber and other forest produce, as well as drift and waif wood, and India-rubber, which are shown in the same statements as timber felled and forest produce collected by Government agency, No. 58 to No. 62, as a matter of convenience in keeping the accounts.

164. In the Gáro Hills, 4 maunds 29 seers and 8 chattaks of caoutchouc were bought at Rs. 20 and sold again at Rs. 60 per maund, except 5 seers 8 chattaks lost in drying, and 15 seers remaining in store at the close of the year.

165. The experimental tapping of the 50 Rubber-trees, commenced in 1882-83 in the Darrang and Nowgong division, was continued in the year under report. One of these trees had, however, died, and the produce of a second one was stolen. On the other hand, 6 additional trees, that had not been previously tapped, were added to the former number and included in the experiment. These latter were tapped more severely, incisions having been made only one foot apart, instead of two feet. Full details about this experiment have been furnished by the Divisional Officer, Mr. Campbell. They are contained in Appendix V. of this report.

166. The average yield of one tree, in Rubber and in money, of the 50 trees first taken in hand, in each of the last three years, and that of the 6 trees added to the experiment in the current year, was as shown below. This will be recorded in future every year, so as to show at a glance the income that may be expected from Rubber-trees:—

	1882-83. Average yield per tree in Rubber. Srs. ch.	Rs. As. P.	1883-84. Average yield per tree in Rubber. Srs. ch.	Rs. As. P.	1884-85 Average yield per tree in Rubber. Srs. ch.	Rs. As. P.
Trees Nos. 1 to 50	4 4	8 10 10	1 1	0 13 9	2 5	3 9 0
Trees Nos. 51 to 56 ...	...	.....	...	.....	12 10	17 10 5

167. Of the 6 maunds 34 seers and 1 chattak of Rubber obtained in the Darrang and Nowgong division by this experimental tapping, 3 maunds 11 seers 4 chattaks were sold, after the close of the year, for Rs. 183-12, which amount forms, therefore, no part of the revenue of the year under report; 10 seers and 4 chattaks were appropriated for exhibition specimens, and 1 maund 35 seers and 10½ chattaks in weight are reported to have been lost by drying, whilst 1 maund 16 seers and 14½ chattaks were stolen.

Removal of produce by consumers and purchasers

168. As already stated above, the working of the forests in Assam is now entirely done by consumers or purchasers; but there are two distinct systems of working, the one prevailing in Assam Proper, or the Brahmaputra Valley, and the other in Cachar and Sylhet, or the Surma Valley.

169. In Assam Proper, including the Gáro Hills, the northern face of the Khási and Jaintia Hills, as well as the North Cachar and Nága Hills, timber-cutters buy the trees standing in the forest before they receive the permit to enter and fell timber, whilst in Cachar and Sylhet, including the southern face of the Khási and Jaintia Hills, permits are granted to wood-cutters to enter the forests and to fell trees; but their timber is not paid for until it reaches one of the forest revenue stations, where it is measured or counted and paid for accordingly.

170. Poles or saplings, dead wood, charcoal, bamboos, cane, and other minor forest produce, are in Assam Proper also paid for *after* they have been collected, and the cutting of firewood for sale is done according to time permits or licenses, the royalty on which is one rupee per month, or nine rupees per annum.

171. Home permits, or licenses on which the ryots supply themselves with timber and other forest produce exclusively for their own use, are granted free in Assam Proper, including the North Cachar Hills, whilst in Cachar and Sylhet, including the Jaintia Hills, these permits are paid for at the rate of one rupee per year, except that ryots in the Jaintia pargana pay only half, and Santengs in the Jaintia Hills nothing.

Working of the permit system

172. The number of each kind of permit granted in the different divisions and the amount of fees collected in the year under notice, as compared with 1883-84, are shown in Appendix VI. of this report; but, when comparing these figures, it must be remembered that 1883-84 was the first year in which the District Forest Rules were introduced, and that it took in many parts of Assam a considerable time before the mauzadars thoroughly understood them.

173. From the above remarks it will be understood that, with the exception of time permits (firewood for sale) and home permits, these figures do not define or represent in any way the yield of the forests, inasmuch as a trade permit may be for one tree or any number of trees They show merely the number of permits or licenses granted in accordance with the Chief Commissioner's orders, issued in paragraph 10 of the Resolution on last Annual Forest Report.

174. Moreover, representations were made to the Chief Commissioner, and approved, that it was not advisable to insist on the taking out of home permits by people who collected ordinary dry branches in the district forests to prepare their daily meals, or such as might cut occasionally a stick or bamboo to repair their huts or fences around them, to which the falling off in the number of home permits in the Sibságar and Sylhet districts has to be attributed. Home permits are in reality only granted when ryots desire to cut timber, or large quantities of bamboos for building, or firewood for a whole season, or for the whole year.

175. It will thus be seen that, as regards the access of the people to district forests and the use of them in supplying their wants for home consumption, the interference exercised is very little, so much so that Deputy-Commissioners have at various times recommended to do away with home permits altogether.

176. No account whatever is taken of the small quantities of firewood and sticks or bamboos thus collected by the ryots without permits for every-day use in district forests; if the latter were to be done, it would mean an amount of enquiry and interference with the people which is not justifiable, considering no revenue is collected on such produce, and that there is a superabundance of unreserved trees and minor forest produce in all the district forests of the Province. Under these circumstances, it is hardly possible for a mauzadar to curtail the enjoyment of free access to and use of the district forests; and if one of them attempted it, the ryots are by this time sufficiently acquainted with the District Forest Rules not to be backward in representing their grievances to the district forest officer or his subordinates.

177. There has up to the present come only one case in the whole Province to notice in which the ryots found it difficult to obtain their wants for home consumption

from district forests close to their villages. This was in the Rani mauza in the Kámrúp district, and the Chief Commissioner has allowed the issue of home consumption permits in the Rani reserved forest, to meet their requirements.

178. The quantity of forest produce covered by the 2,797 home consumption permits (exclusive of Sylhet, Khási and Jaintia Hills) shown in Appendix VI, was as follows:—

GOÁLPÁRA DIVISION.

Unreserved trees	173
Dead posts	38
Firewood (permits)	136
Minor produce (permits)	38

KÁMRÚP DIVISION.

Unreserved trees	39
Poles, posts, and saplings	2,820
Plough wood	232
Dead Sâl posts	186
Firewood (man's loads)	9,309
Bamboos, rafts	282
Single	3,164
Canes (bundles)	750
Thatching-grass (man's loads)	1,789

DARRANG AND NOWGONG DIVISION.

Unreserved trees	3,141
Poles, saplings, and pieces	1,550
Bamboos	5,718
Canes (bundles)	11,497

SIBSÁGAR DIVISION.

Unreserved trees	7,256
Dead posts	10
Firewood (permits)	263
Ditto (maunds)	4,230
Charcoal ditto	46
Bamboos	7,586
Canes (bundles)	12,692

LAKHIMPUR DIVISION.

Unreserved trees	1,457
Firewood (cartloads)	10

CACHAR DIVISION.

Posts, poles, and pieces	32,362
Bamboos	52,900
Canes (bundles)	916
Reeds (*ekra*, in bundles)	80

No record of the forest produce actually removed on home consumption permits has been kept in the Sylhet division, since the Deputy-Commissioner had no proper forest establishment to collect such statistics.

The solid cubic contents of timber and other wood removed on home permits, as shown above, is estimated at 733,960 cubic feet.

179. The firewood collected under the time permits is for sale, and not for home consumption; it may be obtained either by collecting dead wood in the forests, by the felling of inferior trees, or by collecting inferior drift-wood in the rivers, as might be found most convenient by the purchaser of such permit or license.

180. The remarks in paragraphs 15 and 17 of the Chief Commissioner's Resolution on last year's Forest Report regarding *Garkati* permits seem to have been made under a misapprehension, since they are trade permits, and not home consumption permits. The Gáros, to supply their wants for home consumption, take out no permits, neither are they interfered with in any way; they pay no royalty whatever for such produce.

New forest rules.

181. Revised rules regarding the valuation of forests standing on land allotted for cultivation and the royalty to be collected thereon, as well as respecting free grants, were sanctioned by the Chief Commis-

sioner in Revenue Department Circular No. 19, dated 25th April 1884, published in the *Assam Gazette* of the 21st June 1884, page 307. They are attached to this report as Appendix VII. These rules have given general satisfaction and worked well. Clause (*b*) of Rule 4 was, however, understood by some to mean that reserved trees cut down by ryots on their lands were not to be paid for, which caused a reference to be made by the Commissioner of the Assam Valley Districts. The remarks in paragraph 19 of the Resolution on last Annual Forest Report leave no doubt as to what was intended by the Chief Commissioner.

182. Revised river rules under Section 41 of Act VII. of 1878 (the Indian Forest Act) for the control of timber and other forest produce in transit on the Brahmaputra river within the Province of Assam were also sanctioned by the Chief Commissioner, and published, with the sanction of the Government of India, in notification No. 9, dated 13th March 1885, in the *Assam Gazette* of the 14th of March 1885, page 108. They are attached to this report as Appendix VIII. These rules oblige private owners of forests or their agents to furnish a certificate of origin for timber and other forest produce exported from their estates.

183. The registration of river-borne traffic was organised at Jagi in the Nowgong district, and the checking of timber and other forest produce by the registrar at this station, as is done by the one at Dhubri, has been authorised by the Chief Commissioner.

Account of timber and other forest produce removed

184. The tabular statement in Form No. 63 of the Forest Department Code, attached to this report, gives a full account of the timber and other forest produce cut and removed by consumers or purchasers and the revenue realised on it according to divisions; but to facilitate also a ready comparison of these figures with those of the previous year, tabular statements were compiled and appended to the annual forest reports for the last two years in accordance with the wishes of the Chief Commissioner, as recorded in the Resolution on the Forest Report for 1881-82

185 These appendices, however, gave only the forest produce and revenue collected on it under "II.--Timber and other forest produce removed from the forests by consumers or purchasers," and as the two systems of collecting forest revenue in Assam Proper, as compared with Cachar and Sylhet, are totally distinct, a separate statement was compiled for the latter.

186. In the year under report, the timber and other forest produce removed from the forests in the whole Province have been shown in Appendix IX., and the royalty on timber and other forest produce removed by purchasers in the whole Province and such as was collected under other heads, have been shown in Appendix X., in obedience to the orders contained in paragraphs 14 and 15 of the Resolution on last year's report.

187 The timber trade in Lower Assam remained as dull, or even became more so, in the year under report than it had been in 1883-84, and all traders are agreed that the prices offered for their timber were so low that they could not afford to sell or to work out more timber until prices had gone up again.

188 The consequence of this has been that the timber brought out from the Gáro Hills, Goálpára, Kamrúp, and Khási Hills divisions, which chiefly is exported to Bengal, has again been much less than in the previous year, and there is no sign of improvement up to date.

The yield of the forests in Upper Assam, *i.e.*, in the Darrang-Nowgong, Sibságar, and Lakhimpur divisions, as well as in Cachar and Sylhet, the produce from which is worked out more for local consumption, has on the contrary increased, although the timber from these forests is not nearly so valuable as the Sâl timber in the forests of Lower Assam.

189. The prices of timber in the latter cannot continue so low for long, and as the trees in the Government forests are much superior to those in private forests, there is no doubt that they will sell fast enough, as soon as the market improves, as we know it must do on account of the limited supply. On the other hand, the loss of the interest on the revenue which thus remains uncollected, will not be as much as the loss in revenue would amount to, if the royalty on Sâl-trees was lowered, a step which the Conservator cannot recommend, considering that the forests have hitherto been worked quite up to their ordinary capability.

190. The number of trees which were removed by purchasers in the year under report from the forests of the valley districts and those in the Gáro, Khási, and Nága

Hills, and their estimated cubic contents, as compared with the previous year, were the following:—

	1883-84					1884 85				
	Sâl.	Other reserved trees	Unreserved trees	Total	Equivalent in cubic feet	Sâl	Other reserved trees	Unreserved trees.	Total	Equivalent in cubic feet
From reserved forests	4,023	860	373	5,256	157,680	2,676	460	1 468	4 604	138,120
„ protected and district forests	1,869	2,233	2,091	6,193	185,790	897	1 779	3,083	5,759	172,770
Total.....	5,892	3,093	2,464	11,449	343,470	3,573	2,239	4,551	10 363	310,890

191. The solid cubic contents per tree has again, as last year, been taken at an average of 30 cubic feet. There are, of course, instances in which it is three and four times as much, but they are rare; and, everything considered, this estimate seems to be fairly correct.

192. The estimated solid cubic contents of boats, poles, and dead wood worked out by purchasers from the forests in the valley districts and the adjoining Gáro, Khási, and Nága Hills, as compared with the previous year, were as follows:—

	1883 84			1884 85		
	Poles C ft	Boats C ft	Dead wood C ft	Poles C ft	Boats C ft	Dead wood C ft
From reserved forests	8,790	3,200	108,950	22 800	325	69 750
„ protected and district forests	2,930	40,325	157,320	12,740	26,775	68 460
Total	11,720	43,525	266,270	35,540	27,100	138,210

In addition to the above, there were 100 sleepers and 99 planks and other small pieces containing about 500 cubic feet brought out of the Lakhimpur and Nowgong district forests respectively.

193. From the Government, foreign, and private forests in Cachar and Sylhet the following timber and other woods were brought out in the year under report by purchasers, as compared with the previous year:—

	1883 84			1884 85		
	Logs	Posts and planks	Fire wood	Logs	Posts and planks	Fire wood
	C.ft	C ft	C.ft.	C ft	C ft	C ft
On Government forests	225,486	1,361	6,928	254,559	2,491	9,710
„ foreign „	39,445	.....	228	25,922		50
„ private „	408,729	1,167	11,648	268,491	1,77	31,896
Total.....	673,660	2,528	18,804	548,972	4,266	41 656

194. The above figures show that the removal of timber and other woods from the Government forests has increased, whilst the removal of logs from foreign and private forests has decreased, particularly so from the latter, which is attributed by the Divisional Officer to the fact that trees in private forests are getting scarce and less accessible, and that the owners have latterly better recognised the importance and value of their forests, and raised the prices of trees, so as to make them more or less the same as in Government forests. The quantity of posts and planks, as well as of firewood, removed from private forests has increased.

Sale of trees on land allotted for cultivation

195. The area of forest land allotted for cultivation during the year, and the amounts paid for the trees standing on such land, as compared with the previous year, are shown in the following table. There is naturally always fluctuation in the area so taken up, depending on the prosperity of the tea trade in general, or on the success attained by one or the other estate, by which extension of tea cultivation is encouraged. Not a little depends also on the successful speculation of individuals, since much of the land taken up at present is either not brought at all under cultivation, or only a small portion of it, it

being chiefly used for speculating or to increase the area to improve appearances, as, for instance, when companies are formed by throwing together several estates, and so forth:—

Name of division	Area of forest land allotted for cultivation in acres				Amount of forest revenue realised and due				Average amount per acre			
	1883-84	1884-85	Increase	Decrease.	1883-84	1884-85.	Increase	Decrease.	1883-84	1884-85.	Increase	Decrease.
					Rs.	Rs	Rs	Rs	Rs. As P.	Rs. As. P	Rs. As. P	Rs As. P.
Kámrup	...	461	461	...	...	979	979	...	.....	2 2 0	2 2 0	.....
Darrang and Nowgong	1,005	2,524	1,519	...	3,343	6,526	3,183	...	3 5 3	2 9 4	.....	0 11 11
Sibságar	649	1,165	516	...	1,150	2,910	1,760	...	1 12 4	2 8 0	0 11 8	.....
Lakhimpur	1,962	37	...	1 925	3,038	89	...	2,949	1 8 9	2 6 6	0 13 9	.....
Cachar	923	442	...	481	3,401	797	...	2,604	3 10 11	1 12 10	.....	1 14 1
Sylhet	177	5,183	5,006	..	70	1,330	1,260		0 6 4	0 4 1	.....	0 2 3
Total	4,716	9,812	7,502	2,406	11,002	12,631	7,182	5,553	2 5 3	1 4 7	.....	1 0 8

196. Of the above amount of Rs. 11,002, the value of trees and other forest produce on land allotted for cultivation in 1883-84, Rs. 4,028 were realised in the year under report in the Sibságar, Cachar, and Lakhimpur divisions, and of the amount of Rs. 12,631 shown as realised and due on account of the value of trees and other forest produce on land leased in 1884-85, Rs. 301 were realised already in 1883-84 in Nowgong, whilst Rs. 2,736 remained outstanding at the close of the year.

197. The amount of Rs. 5,117 out of the total revenue of Rs. 18,739, shown in Appendix X. as realised on account of trees and other forest produce on land allotted for cultivation was on account of outstandings from years previous to 1883-84, and is therefore excluded from the figures in the above statement.

The Caoutchouc or Rubber trade

198. The yield of Caoutchouc or India-rubber from the Government forests in Assam can only be ascertained by deducting imports from exports, as was done heretofore; but, as remarked in the Resolution on last year's Forest Report, although the exports are registered with exactitude, the imports are registered very imperfectly, so that there is some doubt about the results thus obtained being quite correct. The difference between exports and imports in the year under report was 7,290 maunds, presumably the yield of the Assam forests, as compared with 8,150 maunds in the previous year. The difference is small, and cannot with certainty be attributed to any particular cause. It is, however, most probably due to the sudden fall in the price of Rubber in the market, which made traders less active, as seems also to be indicated by the fact that the Rubber *mahâls* in Kámrúp and the Nága Hills were not sold at all for the year under report, as will be seen from the following statement showing the amount of revenue collected on account of the sale of Rubber-mahâls in the different districts:—

1	2	3	4	5
Name of district.	Amount realised on account of Rubber *mahâls* sold in 1883-84.	Total amount for which Rubber *mahâls* were sold in 1884-85.	Amount realised on account of Rubber *mahâls* sold in 1884-85.	Amount outstanding on the 1st of April 1885 on account of Rubber *mahâls* sold in 1884-85.
	Rs.	Rs.	Rs.	Rs.
Darrang	.....	22,100	22,100	.....
Nowgong	.....	280	280	.....
Lakhimpur	5,000	5,080	5,080	.....
Cachar	1,000	1,700	850	850
Khási Hills	.....	350	350	.....
Total ...	6,000	29,510	28,660	850

Account of produce removed by purchasers according to divisions.

Gáro Hills division

199. The number of trees sold standing in the forests to purchasers in the Gáro Hills division was 469, as compared with 989 in the previous year. They were all felled in district forests in accordance with the standing orders on the subject, because it is not considered advisable for political reasons to interfere with *jhúming* in these hills, even though Sâl and other superior trees might exist, so their early removal will be the best way to economise the supply, and, besides this, the trees would rapidly deteriorate on the *jhúms*, even though not cut down.

The sale of a much smaller number of trees is due to the stagnation in the timber trade already mentioned.

200. The number of boats or dugouts removed from the forests was 910 by the Someswari river, as compared with 1,375 in the previous year. They seem to have been of a very inferior kind, since the *ad valorem* duty of 10 per cent. on the 910 boats came to Rs. 371 only. From other localities only one boat was sold at Rs 10.

201. The removal of dead wood from the forests in the Gáro Hills came to 1,541 pieces, as compared with 2,852 worked out in the previous year.

202. *Garkati* permits or licenses are taken out by people to cut and collect poles, saplings, bamboos, and minor forest produce, such as reeds and grass, in the Gáro Hills for sale at the markets in or near the plains; they are sold to Gáros at 6 annas and to foreigners at Rs. 2 per license.

The sale of them is entrusted to forest subordinates, mauzadars, lachmas, and respectable shop-keepers, who receive one anna commission in the rupee for all money realised on this account.

The number of *garkati* licenses sold in the year under report, as compared with the two previous years, was as follows:—

	1882-83.	1883-84.	1884-85.
Gáro permits	2,358	2,300	1,388
Foreign „	1,223	2,210	2,073
Total	3,581	4,510	3,461
In Government forests	3,043	4,029	2,886
In shared forests	538	481	575
Total	3,581	4,510	3,461

The falling off in the number of *garkati* permits sold is stated by the Divisional Officer to be more apparent than real, because a considerable amount of the revenue collected from this source was not received until after the close of the financial year, and the number of permits covered by it will, therefore, appear in the accounts of 1885-86.

Goálpara division

203. The number of trees sold in the Goálpára division was 1,361, as compared with 1,863 sold in the previous year, which decrease has also chiefly to be attributed to the dull state of the export timber trade. The renewed demand for tháljat by the zamindars has, however, also kept some of the timber-cutters from working, as well as a scare caused by a tiger who killed several wood-cutters in the Chirang reserve.

204. The forests from which the 1,361 trees sold in the year were worked out were the following:—

Guma Reserve	602	trees.
Sidli „	221	„
Chirang „	126	„
Ripu „	331	„
District forests	81	„
Total	1,361	„

The average cubic contents per tree ascertained by actual measurement were found by the Divisional Officer to be 32 cubic feet.

205. The comparatively small yield of district forests in the Goálpára division, as compared with reserves, is partly due to their limited extent, and partly to the as yet small size of the trees.

206. At the Dhubri check station the following timber and other forest produce were found not marked or not covered by a pass, and had, therefore, to pay royalty:—

Description.	Number or quantity.	Amount of royalty. Rs.
Sâl logs	2	5
„ dugouts	4	33
Dead Sâl logs	108	99
Sâl saplings	525	33
Other wood dugouts	8	36
„ „ logs	4	1
Charcoal	7½	1
Cane	25,019	187
Total	.....	395

These receipts are Rs. 1,362 less than in the previous year; but as this signifies a better control in the forests of the different divisions, it is tantamount to improvement.

Kámrúp division

207. The trees sold in the Kámrúp division, as compared with the previous year, were as follows:—

	1882-83.	1883-84.	1884-85.
From reserves	4,134	3,125	1,770
„ district forests	2,135	1,324	871
Total	6,269	4,449	2,641

This decrease is also due to the stagnation in the export timber trade, since by far the largest portion of the timber worked out formerly from the Kámrúp forests was taken for sale to Bengal.

208. The 2,641 standing trees sold in the year were used as follows:—

	1882-83.	1883-84.	1884-85.
For boats or dugouts	3,215	1,019	1,451
„ dhums or short logs	2,739	3,159	702
„ conversion into beams, planks, and other scantlings.	315	271	488
Total	6,269	4,449	2,641

It will thus be seen that the decrease took place entirely in the trees cut for "dhums" or short logs, which are exported to Bengal for the building of country boats, whilst the number of trees sold for dugouts and for conversion into building timber, or, in othes words, for local requirements, has actually increased. The Department Public Workr took 165 trees during the year

209. Of the total number of 837 trade permits, including time permits for firewood, 569 were granted in reserves, 234 in district, and 34 in the Jirang (Khási Hills) private forests.

Out of the total number of 351 home consumption permits issued in the Kámrúp district, 200 were granted by tahsildars and mauzadars.

Darrang and Nowgong division

210. The number of trees sold to purchasers in the Darrang and Nowgong division during the year, as compared with the two previous years, was as follows:—

	1882-83.	1883-84.	1884-85.
From reserves ...	160	333	881
„ district forests ...	1,652	1,115	1,531
Total	1,812	1,448	2,412

Out of these, 1,883 were sold in the Darrang and 529 in the Nowgong district.

All other items, except the Rubber *mahal*, which realised, as already stated in paragraph 198 of this report, Rs. 22,380, are of minor importance.

Sibságar division

211. The number of trees sold in the Sibságar division, as compared with the two previous years, was as follows:—

	1882-83.	1883-84.	1884-85.
From reserves ...	702	129	673
„ district forests ...	351	1,032	908
Total	1,053	1,161	1,581

This shows a steady increase in the sale of trees, all of which are used locally, and the Divisional Officer correctly points out that the very large areas of forest, held by tea-planters and others, naturally prevent a rapid increase in the sale of trees. The District Forest Rules are said to have worked very satisfactorily.

Besides the trees sold standing in the forest, there were 115 boats brought down by the Dhansiri river from the Nága Hills, and royalty paid on them.

Lakhimpur division

212. The number of trees sold in the Lakhimpur division, as compared with the two previous years, has been as follows:—

	1882-83.	1883-84.	1884-85.
From protected and district forests ...	1,260	1,436	1,889

This also is an increase, which would have been even larger if it had not been for the difficulty of checking illegal fellings in the extensive forests north of the Brahmaputra, where men so trespassing, unless they are caught in the very act of felling trees, can, by means of the numerous water channels, easily get away undetected with the timber to the Brahmaputra, and there declare it as having been brought from beyond the Inner Line, and, as such, not liable to pay royalty. Representations have accordingly been made to the Chief Commissioner to permit the collecting of royalty on forest produce coming from beyond the Inner Line, as was done formerly, since the Deputy-Commissioner sees no objection to this being done. The Divisional Officer estimates that about Rs. 5,000 are not collected in consequence of the present rule.

213. The increase in cane from 18,100 to 91,350 bundles is very large. This is however, not a real increase in yield, but accounted for rather by the fact that previous to 1883-84 no royalty was collected on cane, and therefore no record kept, and as this is a produce easily concealed, much of it was smuggled in the first year undetected, whilst in the year under report the control has been effective, which, in part at least, accounts for the apparently large increase. These remarks also apply, although not to the same extent, to the Sibságar, Darrang, and Nowgong divisions, and the decrease of 38,214 bundles in the Goalpára division originated in the same improved control, because all the cane which escaped in upper Assam, where most of it is procured, was detected in 1883-84 at the Dhubri check station, and therefore entered in the registers of the Goálpára division, whilst in the year under notice the cane was accounted for in the divisions where it was actually cut and collected.

Cachar division.

214. In the Cachar division the number of logs brought from the Government forests during the year, as compared with the two previous years, was as follows:—

		1882-83.	1883-84.	1884-85.
From reserved forests	...	1,472	4,785	5,086
„ district forests	...	...	1,488	1,961
	Total	1,472	6,273	7,047

This is 301 more logs from reserves and 473 more from district forests than were brought out in the previous year.

215. In the import of logs from foreign forests there has been a decrease of 219 logs, which the Divisional Officer chiefly attributes to the breakdown of a workshop for the manufacture of tea-boxes, that had been started by the Mahárája of Manipur at Lakhipur in the district of Cachar.

216. The number of logs worked out from private forests was 7,795 less than in the previous year, part of which is accounted for by the Divisional Officer having classed a large number as firewood, because they were inferior. Both the decrease in the number of logs, as well as the inferiority of the wood brought from private forests indicate that the supply of good timber, in the more accessible localities at any rate, is becoming less, which is quite natural, considering the excessive working of these forests in the last few years, and if, in addition to this, the owners raise the price of trees, as they are said to have done, the Government forests will soon be able to compete with the private forests on equal terms. As it is, the number of logs exported from private forests in the year under report was only about double that exported from Government forests, whilst in 1882-83 it was about fifteen times as much.

217. The number of logs removed during the year from the Government forests of each of the three classes of wood, as compared with the two previous years, was as follows:—

	1882-83. Logs.	1883-84. Logs.	1884-85. Logs.
First-class timber	860	536	798
Second „ „	481	164	605
Third „ „	131	5,573	5,644
Total	1,472	6,273	7,047

218. As regards other minor forest produce, reference to Appendices IX. and XI. will show that the quantities of each kind brought out from Government forests have increased, whilst those from foreign forests have all decreased. The latter has also been the case in the private forests, except with posts and planks, bamboos and firewood, in the removal of which there has been a slight increase. The larger removal of bamboos from private forests is attributed by the Divisional Officer to the clearing of lands

overgrown with them for tea cultivation, and the increase in firewood is partly due, as already explained, to much of the wood, which had formerly been shown as timber, having been entered under this head because of its inferior quality.

The removal of thatching-grass and reeds from private forests has always been larger than from Government forests, which is natural, since both prevail to a greater extent in the open country. The increase in the quantity removed from Government forests is attributed to a comparative scarcity on private lands near Silchar.

219. The total number of logs registered during the year in the Cachar division from Government, foreign, and private forests, and their cubic contents, as compared with the two previous years, was as follows:—

	1882-83.	1883-84.	1884-85.
Number of logs	22,925	27,354	19,720
Number of cubic feet	6,05,280	6,64,778	5,28,550

This shows a considerable decrease in the timber trade, which, however, took place entirely in the foreign and private forests, whilst, as already stated, it increased in the Government forests. Part of this apparently large decrease in the removal of timber is, however, also explained by the Divisional Officer having classed a large number of the logs from private forests as firewood, because they were inferior. This view is also borne out by the average cubic contents per log of timber in the current year having been 26·80 cubic feet, as compared with 24·30 cubic feet in 1883-84.

220. The export of logs from the Cachar district during the year under report, as compared with the two previous years, was as follows:—

	1882-83.	1883-84.	1884-85.
From Government and foreign forests	1,184	3,268	3,503
From private forests	11,281	14,208	8,361
Total	12,465	17,476	11,864

Deducting the 11,864 logs from 19,720, the total number of logs registered, it will be seen that 7,856 remained in the district of Cachar, as compared with 9,908 logs in 1883-84 and 10,460 logs in 1882-83, or, in other words, that the consumption of timber in the district has decreased; but here also the fact that the inferior logs from private forests were classed as firewood explains to a great extent this falling off, inasmuch as the number of pieces of firewood which remained in the Cachar district has increased in a similar manner in the year under report as the number of logs of timber has decreased, as shown below:—

	1882-83.	1883-84.	1884-85.
Pieces of firewood exported	1,927	384	37
" " remaining in the district	20,010	8,903	20,293

221. The export of forest produce from the North Cachar Hills, as registered at Diyangmukh, shows again a decrease in the number of dugouts and planks, but an increase in the number of posts and oars. The total quantity of forest produce taken from the North Cachar Hills is as yet small, and, as is usual in such cases, when first proper control is introduced, there has been a falling off in the exports for a couple of years; but this must soon right itself.

The estimated value of the exports in the year under report was Rs. 2,782, as compared with Rs. 6,770 in the previous year.

Further details about the yield in the Cachar forest division will be found in Appendices IX. and XI. of this report.

Sylhet division

222. The timber removed from the forests in the Sylhet division was 20,422 cubic feet, as compared with 8,914 cubic feet in the previous year in rough logs, also 1,500 cubic feet of converted timber, as compared with 1,269 cubic feet brought out last year.

Besides the timber, there were 278,763 bamboos, 6,282 bundles of cane, 1,752 bundles of reeds and thatching-grass, and small quantities of other minor produce brought out of the Sylhet forests, and Rs. 1,668 were realised on account of permit and pass-fees.

The right to remove timber and other forest produce from the Patharia and Dinarpur forests was again sold by public auction during the year under report, and realised the sum of Rs. 2,630. Of this amount, Rs. 612-8 were realised in 1883-84 and Rs. 487-8 remained outstanding at the close of the year under report.

Khási and Jaintia Hills division.

223. The chief yield in the Khási and Jaintia Hills division consists, as a rule, of Sál-trees sold from the Jirang and Nungspung forests, immediately adjoining the Kámrúp plains, and therefore managed entirely by the Officer in charge of the Kámrúp Forest division; but in the year

under report only two Sâl and five other reserved trees were sold, owing to the dull state of the export timber trade. Besides these trees, 4,791 bamboos and 361 bundles of thatching-grass were removed from the forests in the Khási and Jaintia Hills division.

Nága Hills division

224. The yield in the Nága Hills division consisted of three reserved trees only.

Free grants of forest produce

225. In the Goálpára division, 285 Sâl-trees, of a value of Rs. 2,850, were made over to the District Engineer, free of royalty, for the construction of bridges on the Northern Trunk Road, as this greatly facilitates communication in several of the most important forest reserves, and 50 trees of a value of Rs. 500 were made over to the sub-divisional officer, for the construction of a Charitable Dispensary at Sidli.

226. In the Darrang and Nowgong division 81 trees, of a value of Rs. 414, were granted free for the construction of huts at the fair of Udalguri.

227. The free grant of trees made to the Assam Railway and Trading Company, in accordance with the concession granted by Government, was the following:—

Description of trees.	Number	Rates Rs.	Value. Rs.	Purpose for which used. For sleepers.	For buildings.	For other purposes.
Reserved trees	3,171	6	19,026	1,731	585	855
Unreserved trees ...	3,461	2	6,922	484	280	2,697

228. These free grants, added to the timber and other forest produce shown in Statements Nos. 62 and 63, and Appendix IX., make up the total yield of the Assam forests.

Imports and exports of forest produce

229. The only foreign country from which timber is imported into Assam is Bhutan, and even this is trifling. It consisted during the year under report of 29 logs and 30 boats, as compared with 80 logs and 146 boats in the previous year.

230. The import of Caoutchouc or India-rubber into Assam during the year under report has been as follows, compared with the previous years:—

	1882-83. Maunds.	1883-84 Maunds.	1884-85. Maunds.
Bhutan	24	86	20
Towang	1,549	248	134
Dafla Hills	535	221	137
Nága, Mishmi, and Singpho Hills ...	1,709	828	287
Lushai Hills	601	135	224
Manipur	168	124	.....
Total	4,586	1,642	802

The export of Caoutchouc from the different districts in Assam, by steamer, has been the following, as compared with the two previous two years:—

	1882-83. Maunds.	1883-84. Maunds.	1884-85. Maunds.
From Goálpára	615	1,484	588
„ Kámrúp	605	80	100
„ Darrang	2,152	2,624	2,717
„ Nowgong	1,622	1,154	963
„ Sibságar	428	684	200
„ Lakhimpur	3,241	3,289	2,752
„ Sylhet	666	462	110
„ Cachar	.....	15	99
Total	9,329	9,792	7,529

Besides this, 563 maunds were exported by boat from Cachar and Sylhet, bringing up the total exports of Rubber during the year to 8,092 maunds, as compared with 10,244 maunds exported in 1883-84.

231. The general imports and exports of forest produce to and from Assam, as registered at Dhubri on the Brahmaputra and Bhairab Bázár on the Megna, were as follows:—

Name of forest produce.	Denomination.	Registered at Dhubri.				Registered at Bhairab Bázár.			
		Imports		Exports		Imports		Exports	
		By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.
Timber	Number	.....	1,232	274,937	6,318	360	1,064	676	.....
Caoutchouc (rubber)	Maunds	.....	68	.....	7,320	.....	.....	563	209
Lac-dye	,,	.....	2	.....	.....	.....	2	.....	.....
Shell and button lac.	,,	.....	.....	2,232	.....	.....	.....	...	.....
Stick lac	,,	.....	.....	350	14,427	.....	.....	190	45
Bamboos	Number	.....	.....	.....	.....	.....	.....	9,61,000	.....
Thatching-grass.....	,,	.....	.....	36,57,100	.....	.....	.....	.....	.....
Reeds (ekra, nol) ...	,,	.....	.....	29,150	.....	.....	.....	.....	.....
Canes	,,	.....	.....	95,579	.....	.....	.....	.....	.....

These figures show that the total imports have been less than in the previous year, as was expected; this is, as in former years, due to the smaller number of tea-boxes imported.

In the exports of timber there has been a general decrease, which must also be attributed to the dull state of the timber market. The small increase in the timber exported by steamer, as registered at Dhubri, is probably due to experimental sales of timber from Assam in Bengal. The export of bamboos was more by 204,956 than in the previous year: they all came from Sylhet and Cachar.

The imports of 68 maunds of Rubber is, no doubt, accounted for by Dhubri being the most convenient place for shipment of all produce coming from the Gáro Hills and the most easterly parts of Bengal.

The exports of thatching-grass, reeds, and canes have also decreased during the year.

CHAPTER V.

Financial Results.

General.

232. The explanations given in the previous chapter regarding the cause of the decreased yield apply equally to the decrease in receipts. The latter have been Rs. 1,80,413 only in the year under report, as compared with Rs. 2,11,445 in the previous year, showing a decrease of Rs. 31,032, which has entirely to be attributed to the stagnation in the export of timber from lower Assam to Bengal.

233. The expenditure has been about the same as in the previous year. It was Rs. 1,97,700, as compared with Rs. 1,99,562 in 1883-84. No reductions can well be made in this without risking the safety of the forests and stopping progress in the work of organisation. Under "A.—Conservancy and Works" the expenditure has been about Rs. 4,000 more than in the previous year, mainly on account of road work in the Gáro Hills, whilst under "B.—Establishments" it has been about Rs. 6,000 less, as there has been a vacancy amongst the superior officers, caused by Mr. Ludlow's death, and because one officer, Mr. Mein, was on leave.

234. Deducting the receipts from the expenditure, it leaves a deficit of Rs. 17,286 as the financial results of the year's transaction, which is much to be regretted; but the causes of it are, as already explained, the general dull state of the timber trade, and therefore quite beyond the powers of the Forest Department to avert.

235. The summary of revenue and expenditure attached to this report (Form No. 53) shows the receipts and expenditure according to divisions under the prescribed service heads. The receipts include all income from forest resources, whether collected directly by the Forest Department or by the Revenue Department, and all the expenditure on forest work, whether disbursed by the Forest or Revenue Department, the other prescribed financial statements attached to this report are arranged in accordance with the same principle.

236. In paragraph 15 of the Resolution on last year's Forest Report, the Chief Commissioner has ordered that the figures should be arranged in this report in a more intelligible way, so as to show the income realised by the Revenue Department, and that realised by the Forest Department separately.

237. Since 1881 Forest Officers have been made the Assistants to the Deputy-Commissioners as regards forest matters. They have been placed in entire charge of all district forests, formerly managed by the Revenue Department, and mauzadars and tahsildars been placed under the direct orders of the Divisional Forest Officers, so that, barring the issue of a few notifications about Rubber, Lac, and Cassia *maháls*, and receipt of applications for waste land, the Revenue Department has nothing to do with forest receipts since 1881.

An attempt has, however, been made to show in Appendix XII. the income from different sources, in obedience to the Chief Commissioner's orders recorded in paragraph 15 of the Resolution on last year's Forest Report.

238. A few remarks are necessary to make the heads under which the total forest revenue has been distributed in Appendix XII. intelligible.

The amount in column 2 includes all revenue realised by the Forest Department on timber, firewood, charcoal, bamboos, and grass, whether they have been worked out by direct departmental agency, or by consumers or purchasers, and also confiscated, drift and waif wood.

The amount in column 3 is the royalty on *Garkati* permits, or licenses in the Gáro Hills division, which are, as already explained, not for home consumption, but for trade. They are issued and the royalty on them collected by the Forest Department. The Revenue Department has nothing to do with the *Garkati* licenses.

The amount in column 4 includes the duty realised on timber from Manipur and the Lushai Hills, as well as the fees levied on passes for timber from Bhutan, and the Government share of the proceeds from the private forests in the Gáro and Khási Hills.

The amount in column 5 includes all receipts on account of fines and forfeitures, refunds, and from other miscellaneous sources, as realised by the Forest Department.

The amount in column 6 includes all royalty realised on forest produce sold by mauzadars. Their forest accounts are controlled and checked entirely by the Forest Department. The Revenue Department has nothing to do with these collections. Mauzadars are agents for the Forest Department in the same sense as they are agents of the Revenue Department, and receive from the former the same commission on forest revenue as the latter pays on land revenue, &c., &c.

The amount in column 8 includes all revenue collected by tahsildars. These latter are paid servants of Government in the Revenue Department; but their forest accounts are controlled and checked entirely by the Forest Department, and the Revenue Department has nothing to do with realising this revenue, beyond paying the tahsildars their pay. The Forest Department saves the 10 per cent. commission which has to be paid to mauzadars; but to show, for this reason, the forest revenue as realised by the Revenue Department seems to the Conservator misleading. It has, however, been done in the Appendix XII., because the Chief Commissioner's orders in the Resolution on last year's Forest Report are to separate all forest revenue realised by the Revenue Department from that realised by the Forest Department.

The amount in column 9 includes the value of timber and other forest produce on lands taken up for cultivation. This forest produce is valued by the Forest Officer, and the accounts of it are controlled and checked by the Forest Department, and so are the cutting and removal of the forest produce from such lands. In short, the management is entirely carried out by the Forest and not by the Revenue Department. The royalty is entered in the Revenue Department books, which, however, is quite superfluous, and representations will be made to the Chief Commissioner to allow this unnecessary work to be discontinued.

The amount in column 10 shows the royalty realised by sale of Rubber-*mahâls*. The only concern the Revenue Department has with this is the issue of notifications in the *Gazette* regarding the sale of these *mahâls*, and the selling of them by public auction, and the entry of the royalty in the books, which would not occupy six hours in the year, whilst the Forest Department has to watch all the year round to make sure that no person trespasses in the forests excluded from the *mahâls*, and that the conditions of the lease are adhered to, and no excesses committed in the way of overtapping, as used to be the case before there was a Forest Department in this Province, and to which the utter ruin of nearly all the old Rubber-trees that had produced the large quantities of India-rubber exported in those days is due, because it was quite beyond the power and knowledge of the Revenue Department to prevent it.

The above remarks apply with equal force to the sale of the Cassia and Lac *mahâls*, the revenue from which is insignificant. There is no necessity for the Revenue Department to keep these items any longer on its books, since all Forest Officers are now assistants to Deputy-Commissioners, and it means keeping accounts in the Revenue Department, which cannot be checked or controlled by it.

239. From the above remarks it will be seen that, beyond a few trivial matters, the realisation of forest revenue depends on the efficiency of the Forest Department, and not on that of the Revenue Department; in fact, whatever the latter department does do in this respect could be done by the Forest Department more efficiently without additional cost or labour.

240. The receipts on account of royalty on forest produce, realised in the year under report, as compared with the previous year, were Rs. 33,438 less, which is

accounted for by the dull state of the export timber trade in Lower Assam, including the Gáro, Khási, and Jaintia Hills.

The receipts on *Garkati* permits, or licenses, have been slightly less. This, it has already been stated in paragraph 202 of this report, is more apparent than real, and has almost entirely to be attributed to a considerable amount of this revenue due for the year under report not having been realised until after the close of the year.

The falling off in the receipts from forests not managed by Government is chiefly caused in the Khasi and Jaintia Hills division by the stagnation in the export timber trade. The falling off in the duty on timber from Manipur and the Lushai Hills is small, and attributed mainly to the failure of the trade in tea-boxes, which had been started by the Maháraja of Manipur.

The miscellaneous revenue shows a slight increase, which has to be attributed to a number of small unusual receipts.

The revenue realised on permits or licenses granted by mauzadars has risen from Rs. 4,518 in 1883-84 to Rs. 6,451, which is due to the stricter supervision exercised by Forest Officers over these men These receipts are as yet confined to three divisions in the Province

The slight increase in the amount realised by tahsildars must also be attributed to the stricter supervision by Forest Officers.

The revenue on account of timber on lands taken up for cultivation has been Rs. 2,426 more than in the previous year, which is due to increased forest areas having been taken up in the Darrang and Nowgong as well as in the Sibságar division for tea cultivation.

The increased receipts on account of Rubber are not due to increased yield, since there has been a slight falling off in this on account of the lower prices which prevailed. They are accounted for by the fact that Rs. 5,000, due in the Lakhimpur division for 1883-84, were realised in 1884-85

The receipts on account of the Cassia and Lac-*mahâls* are small. The increase in revenue from the former has to be attributed to Rs. 170 having been paid in the year under report in advance for 1885-86, and the increase in revenue from the latter cannot be attributed to any particular cause, but is an ordinary fluctuation in trade.

241 The receipts and expenditure, arranged under the three great heads "I.—Departmental timber operations," "II.—Other revenue," and "III.—Formation, protection and improvement of forests," have been shown in the prescribed Tabular Statement No 57 attached to this report

The totals of receipts and charges under those three heads, as compared with the previous year, were the following:—

	1883-84		1884 85	
	Receipts Rs	Charges Rs	Receipts Rs	Charges Rs
I.—Departmental timber operations	4,453	1,302	1,540	2,756
II.—Other revenue	2,06,992	68,931	1,78,873	65 822
III.—Formation, protection, and improvement of forests	.....	1,29,329	.....	1,29,122
Total	2,11,445	1,99,562	1,80,413	1,97,700

The amounts under head I, in the above statement include receipts under "I.—Timber and other produce removed from the forests by Government agency," and those under "III.—Confiscated drift and waif wood," and charges under "A.I.—Timber and other produce removed by Government agency," and those under "A.III.—Confiscated drift and waif wood."

The amounts under "II.—Other revenue" in the statement above include all the receipts not shown under head I., and charges under A.II., IV., V., IX., one quarter of VI., and half of "B.—Establishments."

The amount shown under head "III.—Formation, protection, and improvement of forests," includes the charges under A.VII., VIII., three-quarters of VI., and half of "B.—Establishments."

Revenue.

242. The forest revenue collected during the year, as compared with 1883-84, was as follows:—

Revenue budget heads.	1883-84.	1884-85.	Increase.	Decrease.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency ...	1,774 13 6	333 0 0	.....	1,441 13 6
II.—Timber and other produce removed from the forests by consumers and purchasers	1,97,276 8 11	1,71,891 1 5	.....	25,385 7 6
III.—Confiscated, drift, and waif wood	2,678 2 5	1,207 9 0	.....	1,470 9 5
IV.—Revenue from forests not managed by Government	7,379 10 3	3,742 5 6	.....	3,637 4 9
V.—Miscellaneous.....	2,335 8 0	3,239 5 5	903 13 5	.....
Total.....	2,11,444 11 1	1,80,413 5 4	903 13 5	31,935 3 2

The decrease under "I.—Timber and other produce removed from the forests by Government agency" is accounted for by the closing of all timber operations by direct departmental agency, and no timber stock having remained from former years, by the sale of which revenue might have been realised, the small receipts there have been under this head are for the most part the money realised by the sale of Rubber that had been bought by the department from people in the Gáro Hills.

The decrease under "II.—Timber and other produce removed from the forests by consumers and purchasers" is very heavy, and is entirely to be attributed, as already explained, to the great stagnation in the timber trade in Bengal. The wood-cutters declare that it is not advantageous for them to work out timber at the present low prices, and that, even if they were satisfied with very small profits, so few traders had come from Bengal to Assam to buy timber during the last two years, that they could not have sold much, and therefore they naturally prefer now to attend to their agricultural pursuits, and wait until prices go up again. As for the department lowering the rates of royalty to stimulate sales, this cannot be advocated by the Conservator, because, as already stated, the valuable Sâl-forests in Lower Assam, in which the sales of trees were so much less, have been worked fully up to their ordinary capability, and it will do no harm to the forests if fellings are less for a year or two, there is no growing material which would deteriorate, or be wasted in those forests in consequence of fewer trees being removed.

The consequence of this decrease, almost amounting to a stoppage in the export trade of Sâl to Bengal, has naturally been, that the falling off in receipts has taken place, as in the previous year, entirely in those divisions in which the Sâl-forests exist. The decrease was the following:—

	Rs
Gáro Hills division	2,088
Goálpára „	20,489
Kámrúp „	20,250
Khási and Jaintia Hills division	1,176
Total	44,003

In the other divisions, on the contrary, there has been an increase, and if the value of timber granted free to the Assam Railways and Trading Company and others were shown, as it should be, for the purpose of a fair comparison between receipts from forest resources and charges on account of forest conservancy, the deficit of Rs. 17,286 would be changed into a surplus of Rs. 12,426.

The decrease under "III.—Confiscated and drift wood" took place chiefly in the Kámrúp and Cachar divisions, and is due to stricter supervision, which makes confiscations now of rare occurrence.

The decrease under "IV.—Revenue from forests not managed by Government" is, as already explained, accounted for by the fact that very little Sâl-timber has been sold in the Khási Hills forests, and a smaller export of timber and other forest produce from Manipur and the Lushai Hills.

The small increase under "V.—Miscellaneous" is due to a number of small accidental receipts in different divisions, which need not be detailed here.

The total income from the sale of the different kinds of forest produce according to divisions, and as compared with that of the previous year, is shown in the fullest detail in Appendix X., attached to this report.

243. The expenditure during the year under report, as compared with that in the previous year, will be seen from the subjoined table:—

Expenditure.

Budget heads.	1883-84.	1884-85.	Increase.	Decrease.
A.—Conservancy and Works.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency.	1,247 1 9	2,687 6 3	1,440 4 6	.....
II.—Timber and other produce removed from the forests by consumers and purchasers.	6,750 15 7	6,070 14 0	.....	680 1 7
III.—Confiscated, drift, and waif wood.....	54 7 0	68 7 0	14 0 0	.....
IV.—Revenue from forests not managed by Government.	.....	.....	.....	.....
V.—Rent of leased forests, and payments to shareholders in forests managed by Government.	.....	.....	.....	.....
VI.—Live and dead stock	14,353 14 3	13,989 9 1	.....	364 5 2
VII.—Communications and buildings	20,993 14 1	24,066 13 0	3,072 14 11	.....
VIII.—Demarcation, improvement, and extension of forests.	43,110 4 7	43,083 6 0	.....	26 14 7
IX.—Miscellaneous	4,131 7 4	4,773 7 0	641 15 8	.....
Total of A—Conservancy and Works	90,642 0 7	94,739 14 4	5,169 3 1	1,071 5 4
B.—Establishments.				
I.—Salaries	89,583 11 7	82,969 8 6	.....	6,614 3 1
II.—Travelling allowances.....	15,342 4 2	16,295 4 10	953 0 8	.....
III.—Contingencies	3,994 6 5	3,695 1 3	.....	299 5 2
Total of B—Establishments	1,08,920 6 2	1,02,959 14 7	953 0 8	6,913 8 3
Grand Total of Expenditure	1,99,562 6 9	1,97,699 12 11	6,122 3 9	7,984 13 7

The increase under "A.I.—Timber and other forest produce removed from the forests by Government agency" is chiefly due to the felling and bringing into depôt of the timber for the forest bungalow at Tura in the Gáro Hills. No timber was worked out by the Department for sale.

The decrease under "A.II.—Timber and other produce removed from the forests by consumers and purchasers" is accounted for by a smaller number of forest guards having been entertained for this work.

The decrease under "A.VI.—Live stock, stores, tools and plant" is accounted for by only one elephant having been bought during the year, instead of two, as in the previous year, whilst the feed and keep was higher on account of the animals purchased in the previous year.

The increase under "A.VII.—Communications and buildings" is accounted for by the construction of the Dambu road in the Gáro Hills.

The expenditure under "A.VIII.—Demarcation, improvement, and extension of forests" was almost exactly the same as in the previous year. The cost of demarcation decreased by nearly Rs. 3,000, whilst that of survey increased by about Rs. 1,500, which changes are the natural result of steady progress in the organisation of the Government reserved forests. The expenditure under the other sub-heads was nearly the same as in the previous year, and calls for no special notice here.

The increased expenditure under "A.IX.—Miscellaneous" is accounted for by the absconding of an office peon in the Goálpára division with Rs. 342, and a large refund of revenue collected on cane, about which petitions, pleading ignorance of the forest rules, were submitted to, and remission granted by, the Chief Commissioner.

The decrease under "B.—Establishments, (1) Salaries" was large, and is, as already stated, accounted for by a vacancy amongst the superior officers, caused by Mr. Ludlow's death and the absence of a Deputy-Conservator, Mr. Mein, on furlough.

The increase under "B.II.—Travelling allowance" was partly drawn by the Conservator, but principally by subordinates who have become entitled to higher allowances under the new Travelling Allowance Rules.

The decrease under "B. III.—Contingencies" is small, and accounted for by very little office rent having been paid in the Kámrúp division, and a slight decrease in the payments of official postage.

Surplus and deficit according to divisions.

244. The receipts and expenditure in the different divisions, and their surplus or deficit, are shown in the following table:—

Name of division.	Receipts.	Expenditure.	Surplus.	Deficit.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Direction	1 11 0	25,468 2 10	.....	25,466 7 10
Gáro Hills Division	13,967 12 1	30,224 12 6	.....	16,257 0 5
Goálpára "	14,301 13 8	19,868 14 4	.....	5,567 1 1
Kámrúp "	33,719 4 4	29,264 10 5	4,454 9 11	.....
Darrang and Nowgong Division	39,136 10 9	27,403 14 9	11,732 12 0	.....
Sibságar "	10,428 11 10	19,014 5 8	.....	8,585 9 10
Lakhimpur "	19,151 11 10	21,789 9 1	.....	2,637 13 3
Cachar "	39,222 7 9	19,448 7 4	19,771 0 5	.....
Sylhet "	8,815 11 11	1,067 3 1	7,748 8 10	.....
Khási and Jaintia Hills "	1,649 6 7	4,149 12 11	.....	2,500 6 4
Nága Hills "	18 0 0	.....	18 0 0	.....
Total	1,80,418 5 4	1,97,699 12 11	43,727 15 2	61,014 6 9

This table, if compared with the one given in paragraph 193 of last year's report, will show that the deficit has been caused by short receipts, and not by increased expenditure.

These figures also bear out, what has been explained already several times, that the decrease in receipts has mainly taken place in the Gáro Hills, Goálpára, Kámrúp, and Khási Hills divisions, or, in other words, in lower Assam, where the most valuable of all the forests in Assam, namely, the Sâl forests, exist, and the reduced quantity of timber worked out from these forests is owing to the dullness of the timber trade in Bengal.

The deficit in the Gáro Hills division is so much higher than in the previous year, both on account of smaller receipts and increased expenditure, the former has been explained above, and the latter is due to the construction of the Dambu road, and the building of the Divisional Officer's bungalow at Tura.

The deficit in the Goálpára division, and smaller surplus in the Kámrúp division are entirely due to decreased receipts, since the expenditure has also been very much less in both these divisions than in the previous year.

The surplus in the Darrang and Nowgong division is almost the same as in the previous year, whilst both receipts and expenditure were higher.

The deficit in the Sibságar division is slightly less than in the previous year, whilst both receipts and expenditure were somewhat higher.

The deficit in the Lakhimpur division is about Rs. 3,000 less than in the previous year, on account of increased receipts, the expenditure was about the same.

The surplus in the Cachar division has been more, in consequence of increased receipts and a slight reduction in expenditure, which remarks apply also to the Sylhet division.

The deficit in the Khási and Jaintia Hills division is accounted for entirely by decreased receipts. The latter are not due to the exhaustion of the forests, but to the falling off in the demand for Sâl-timber, as everywhere else in lower Assam.

245. When thus balancing forest receipts and expenditure, the extreme liberality must be remembered with which Government allow ryots in the Brahmaputra Valley, and in the Gáro, Khási and Jaintia Hills to supply themselves free of royalty with every kind of forest produce (except a few reserved trees) for their own use, and in the Cachar and Sylhet districts a merely nominal sum of 8 annas per house for the year is charged.

246. It must also be borne in mind how the Government in the early days of tea cultivation granted, with an equal liberality, large areas of magnificent forests, free of any payments for the trees and other forest produce standing on the land, so that large forests are now held by private individuals, not only supplying to their owners all they want, but also enabling them to compete with Government in the timber trade.

247. These great benefits conferred on the inhabitants do not appear in the forest accounts, and yet they make it next to impossible to show a rapid increase in the income from forest resources just at present.

Value of stock at the end of the year.

248. The value of live and dead stock at the close of the year was Rs. 8,253 more than at the commencement.

Outstanding revenue

249. The amount of revenue outstanding at the close of the year is shown in Statement No. 56 attached to this report. It was Rs. 26,867, as compared with Rs. 29,987 at the end of 1883-84.

CHAPTER VI.

General Remarks.

Establishments.

250. One officer of the superior staff, Mr. A. J. Mein, Deputy-Conservator, third grade, was on furlough from the 20th of March 1884 to the 3rd of April 1885. Mr. E. Ludlow, Assistant-Conservator of Forests, first grade, had furlough granted him with effect from the 9th of May 1884, but soon after died suddenly of cholera. Mr. D. P. Copeland passed the prescribed language examination by the lower standard in Assamese, and was promoted to Assistant-Conservator, second grade. Mr. T. J. Campbell was confirmed in his appointment of Assistant-Conservator, third grade, he also passed in the higher standard of Bengali, and was promoted to Assistant-Conservator, second grade.

251. Babu Jagesvar Sur was confirmed in his appointment of Sub-Assistant-Conservator of Forests, and Forest-ranger Babu Tara Kisher Gupta returned from the Central Forest School at Dehra Dun, and was also promoted to Sub-Assistant-Conservator.

252. The strength of the permanent subordinate forest establishments remained unchanged during the year; but each divisional forest office had a permanent second clerk sanctioned, which has relieved Divisional Forest Officers of desk-work, and enabled them to spend more of their time in the forests.

Conservator's Tour.

253. The Conservator left Shillong, his head-quarters, on the 15th of November 1884, and reached Gauháti on the following day, where forest work in the Kámrúp division was discussed with Mr. Jellicoe, the Divisional Forest Officer. The station of Goálpára was reached on the 25th, and the Eastern Duárs on the 29th in company with the Divisional Forest Officer, Babu Jogesvar Sur. Here the books of the forest-ranger in charge of the eastern range were inspected, also fire-protection and demarcation work in the Sidli and Charaidaka reserves and in the Panbari and Pechadaveri proposed reserved forests, as well as the books of the forester in charge of the western range. On the 4th December the Guma reserve was reached, and fire-protection work inspected, also the books of the forester in charge of the Guma range at Borobada, and Dhubri, the head-quarters of the Goálpára forest division, reached on the 7th of December. Here the Conservator consulted with the Deputy-Commissioner regarding the claims of the zamindars for Thaljat and the acquirement of timber depôt lands under the Land Acquisition Act (1870) to escape the extortionate demands of Thaljat. The divisional forest office was inspected on the 13th, the Fakirganj registering station on the 14th, and the Gáro Hills reached on the 16th, where enquiry was made into the working of the *Garkati* permit or license system. Tura, the head-quarters of the Gáro Hills Forest division, was reached on the 18th, where Mr. Copeland, the Divisional Forest Officer, was met. The forest bungalow under construction at this station, as well as the divisional forest office, were inspected on the two following days. On the 21st Tura was left again, in company with the Divisional Forest Officer, *en route* for the northern range, and the general dullness of the timber trade prevailing here, as in the forests north of the Brahmaputra, enquired into, after which Damra was reached on the 31st of December. Here the works on the new cart-road to Dambu were inspected, and the Deputy-Commissioner, Gáro Hills, met at Chima on the 4th of January, when the labour difficulty was discussed and new arrangements made to ensure progress in the road work. The Gáro Hills were left on the 6th, *en route* for the Kámrúp district. The forests in the Singra range were reached on the 9th, and those in the Kulsi range on the 10th, and demarcation and fire-protection works inspected; the Kulsi plantation was inspected on the 11th, road work in the Pantan reserve on the 12th, fire-protection and demarcation works in the Barduar and Jara reserves on the 13th, and Gauháti reached on the 14th, where the Kámrúp divisional forest office was inspected on the 16th and 17th. The Kámrúp district was left on the 21st, and Shillong reached the next day, *en route* for Sylhet and Cachar. After crossing the Khási Hills, Sylhet was reached on the 7th February, and forest matters discussed with the Deputy-Commissioner the following day, as well as all other forest work disposed of. The station of Sylhet was then left again on the 13th, and Karimganj reached on the 14th. Here forest matters regarding the Langai and Singla proposed reserve, and changes in the management of these forests were discussed with the Sub-divisional Officer, and the Cachar district reached the next day, when the Siyaltek revenue station was inspected. Silchar, the head-quarters of the Divisional Forest Officer, was reached on the 17th, his office inspected on the 20th and

21st, the Sonaimukh revenue station on the 22nd, and Naraindhur, in the Barak reserve, reached on the 23rd, the Bhuban range road inspected on the 24th, and Silchar again reached on the 25th. The Kanairghat revenue station on the Surma river in the Sylhet district was reached on the 1st of March. Here the export of timber and other forest produce from the Jaintia Hills was enquired into, and the issue of permits for the forests in those hills explained, after which the Conservator returned to Sylhet on the 3rd, and left for Companyganj on the 10th. Theriaghat was reached on the 11th, Cherra Punji on the 12th, and Shillong on the 13th. On the 26th the Conservator left Shillong again, and arrived in Gauháti the next day, and at Tezpur on the 30th, where forest matters were discussed with the Deputy-Commissioner during the following day, and Bhairabighat reached on the 2nd of April. Here the divisional forest office was inspected on the 3rd and 4th, the Charduár Rubber Plantation reached on the 5th, and work inspected in Company with Mr. Campbell, the Divisional Officer, on the two following days, fire-protection work in the Balipara reserve on the 8th, and Tezpur reached again on the 9th. Forest matters were then further considered with the Deputy-Commissioner on the 10th, and the Darrang district left the following day for Dibrugarh, the head-quarters of the Lakhimpur forest division. Here the Deputy-Commissioner was consulted about forest matters on the 13th, the divisional forest office inspected on the 15th and 16th, and Dibrugarh left in company with Mr. Barker, the Divisional Forest Officer, on the 17th, for the Upper Dehing forests, where Borbil was reached and forest buildings and demarcation work inspected. On the 18th Margherita was reached, and the lands applied for in that neighbourhood by the Assam Railways and Trading Company inspected, the coal-mines visited on the 19th, and Jaipur reached on the 20th, the Lakhimpur division left the following day for Sibságar, which was reached on the 25th, and Mr. Fordyce, the Divisional Forest Officer, met. Here forest matters were first discussed with the Deputy-Commissioner, then the divisional forest office inspected on the 27th and 28th, and Sibságar left again on the 30th, and Jorhát reached on the 1st May. The books of the forester in charge of the Jorhát range were inspected on the 2nd, and the working of the permit system in the Majuli enquired into, after which the Conservator proceeded to Golághát, inspected the demarcation and plantation work in the Nambor forest and the books of the forest-ranger in charge of the Golághát range. On the 9th of May the Conservator left Golághát *en route* for head-quarters, Gauháti was reached on the 11th, forest work in the Kámrúp division discussed with Mr. Mein, who had returned from leave, on the 13th, and Shillong reached on the 15th of May.

The Conservator had privilege leave for three months, and during the remaining nine months he was absent on tour for 168 days and his camp for 207 days.

Services of Officers.

254. Mr. J. T. Jellicoe was in charge of the Goálpára division from the commencement of the year until the 18th June 1884, when he took charge of the Kamrúp division. He also officiated as Conservator for three months in addition to his charge of the Kámrúp division. His management was, on the whole, satisfactory throughout the year. Mr. Jellicoe was absent from head-quarters for 145 days in the year.

Mr. A. J. Mein was absent the whole year on furlough.

Mr. E. Ludlow was attached to the Goálpára division for only 38 days in the year, after which he went on furlough and soon after died of cholera.

Mr. C. G. D. Fordyce had charge of the Sibságar division during the whole year, and deserves credit for the efforts he has made to ensure the efficient working of the District Forest Rules by mauzadars. Mr. Fordyce was absent from head-quarters for 151 days in the year.

Mr. F. S. Barker was in charge of the Lakhimpur forest division during the whole year, with the exception of the one month he had privilege leave. There has been a slight improvement in his management, but he continues to leave far too much to subordinates, which is the cause of many defects. Mr. Barker was absent from head-quarters for 214 days in the year.

Mr. D. P. Copeland was in charge of the Gáro Hills division during the whole year, except the five weeks he was absent on privilege leave. He deserves much credit for the skill and energy displayed in the construction of the Dambu road, a work carried out successfully under great difficulties. During the ten months and three weeks Mr. Copeland was on duty, he was 200 days away from head-quarters.

Mr. H. G. Young was in charge of the Cachar division for nine months in the year, and the remaining three months he had privilege leave. His management of out-door work

continues to be defective for want of personal attention from him. During the nine months Mr. Young was on duty, he was absent from head-quarters for 143 days.

Mr. T. J. Campbell was in charge of the Darrang and Nowgong division during the whole year, and worked with the same zeal and devotion as in former years. He has been transferred to the Gáro Hills division since the close of the year, and the Conservator has much pleasure in recording that the success of the Charduar Rubber plantation has chiefly to be attributed to Mr. Campbell's close personal attention to this work. Mr. Campbell was absent from head-quarters for 266 days in the year.

Babu Jogesvar Sur was in charge of the Kámrúp Forest division from the beginning of the year to the 18th of June 1884, after which he received charge of the Goálpára division, which he held up to the close of the year. He particularly distinguished himself by his energy in personally superintending the protection of the forest against fire, and the success attained after several years' failure is attributed mainly to his exertions. Babu Jogesvar Sur was absent from head-quarters for 249 days in the year.

Babu Tara Kishor Gupta has given general satisfaction since his return from the Central Forest School, and among the other Forest-rangers Babus Sri Gopal Banerji, Pani Ram Das, and Dina Nath Kar have worked best.

ANNUAL STATEMENTS

AND

APPENDICES.

PROGRESS REPORT OF FOREST ADMINISTRATION IN ASSAM.

FORM No. 49.

FOREST DEPARTMENT, ASSAM.—AREA OF RESERVED FORESTS, 1884-85.

Division or Range.	Civil district or territory.	Name of forest.	Area on 1st April 1884.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1885.		No. and date of Notification of addition or transfer.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres	Equivalent in square miles.	
Gáro Hills Division.	Gáro Hills district.	Dibru Hill	6,080	9	....	.....	6,080	9	
		Jinari	6,640	10	....	.....	6,640	10	
		Chima and Bongshi	8,980	14	....	.....	8,980	14	
		Dhima	5,760	9	....	.....	5,760	9	
		Dilma	1,120	2	....	.....	1,120	2	
		Bajarimla	4,800	7	....	.....	4,800	7	
		Ildek	1,280	2	....	.....	1,280	2	
		Darugiri	2,283	4	....	.....	2,283	4	
		Bangrongiri	8,480	13	....	.....	8,480	13	
		Emanghil	2,080	3	....	.....	2,080	3	
		Lewak	1,280	2	....	.....	1,280	2	
		Sija	1,280	2	....	.....	1,280	2	
		Bolsalgiri	640	1	....	.....	640	1	
		Tura	480	1	....	.....	480	1	
		Dambu	.....	....	4,960	.....	4,960	8	No. 8, dated 12th March 1885.
Goalpára ditto ..	Goalpara ditto ..	Bijni Duar	8,038	13	....	.....	8,038	12	
		Chirang Duar No. 1	69,203	108	....	.....	69,203	108	
		Ditto ditto 2	90,643	142	....	.....	90,643	142	
		Rupu Duar	41,632	65	....	.....	41,632	65	
		Guma "	15,776	25	....	.....	15,776	25	
		Sidli "	43,757	68	....	.....	43,757	68	
		Jengasi Charaidaka	1,730	3	....	.....	1,730	3	
		Adabari	9,180	14	....	.....	9,180	14	
		Bengtol and Darogaon.	7,094	11	*376	.....	7,470	12	
		Bhumesvar Hill	4,576	7	....	*543	4,033	6	
Kamrúp ditto ..	Kámrúp ditto ..	Baidnar	16,260	25	....	*364	15,896	25	
		Pantan	21,910	34	....	.....	21,910	34	
		Matnikhar	2,240	4	....	.....	2,240	4	
		Kulsi plantation	3,680	6	....	.....	3,680	6	
		Jara	1,037	2	....	.....	1,037	2	
		Milmillia	3,610	6	....	.....	3,610	6	
		Mayang	4,800	7	....	.....	4,800	7	
		Itani	11,070	17	....	.....	11,070	17	
		Kawasing	3,570	6	....	.....	3,570	6	
		Simla Hill	317	....	....	.....	317	....	
		Dumpara	497	1	....	.....	497	1	
		Khaksi, Sikrabura Hill.	2,530	4	....	.....	2,530	4	
		Choraputa	120	....	....	.....	120	....	
		Khatkhati Hills	644	1	....	.....	644	1	
		Tarabari	806	1	....	.....	806	1	
		Garubaldha	240	....	....	.....	240	....	
		Khurkhuri	149	....	....	.....	149	....	
		Sursuria Hills	245	....	*725	.....	970	2	
		Gizang	930	1	....	.....	930	1	
		Jaipur	774	1	....	.....	774	1	
		Bargobha	1,190	2	....	.....	1,190	2	
		Nampathar	640	1	....	.....	640	1	
		Barjuli	1,120	2	....	.....	1,120	2	
		Hajo	226	....	....	.....	226	....	
Darrang and Nowgong Division.	Nowgong ditto .	Kholahat	1,878	3	....	.....	1,878	3	
		Deboka	520	1	....	.....	520	1	
		Diju	2,730	4	....	.....	2,730	4	
		Balipara	56,224	88	....	.....	56,224	88	
		Khalingdnar	6,240	10	....	.....	6,240	10	
		Addition to Khalingduar.	6,972	11	....	.....	6,972	11	
	Darrang ditto ..	Charduar	51,200	80	12,941†	.....	64,141	100	No. 14, dated 19th June 1884
		Bhamaraguri	386	1	....	.....	386	1	
		Gamnari	205	....	....	.....	205	....	
		Nowduar	52,480	82	....	.....	52,480	82	
		Singri Hill	1,200	2	....	.....	1,200	2	
Sibságar Division.	Nága Hills ditto ..	Nambor	249,312	390	....	.....	249,312	390	
		Mikir Hill	51,840	81	....	.....	51,840	81	
		Upper Dalgarung	5,312	8	....	.....	5,312	8	
		Lower "	5,120	8	....	.....	5,120	8	
	Sibságar ditto ..	Holongapár	4,892	8	....	.....	4,892	8	
		Dirai	11,773	18	....	.....	11,773	18	
		Abhoypur	15,911	25	....	.....	15,911	25	
		Sola	1,661	3	....	.....	1,661	3	
		Dessi	6,893	11	....	.....	6,893	11	
		Jhansi	18,380	29	....	.....	18,380	29	
Cachar " ..	Cachar ditto ..	Upper Jiri	15,360	24	....	.....	15,360	24	
		Lower "	8,960	14	....	.....	8,960	14	
		Barak	42,880	67	....	.....	42,880	67	
		Sonai	11,520	18	....	.....	11,520	18	
		Katakhal	51,200	80	....	.....	51,200	80	
		Dhalewari	21,120	33	....	.....	21,120	33	
		Inner-Line	325,760	509	....	.....	325,760	509	
Khási and Jaintia Hills Division.	Khási and Jaintia Hills district.	Saipung	32,000	50	....	.....	32,000	50	
		Total	1,481,040	2,314	19,002	907	1,499,141	2,342	

AREA OF UNRESERVED FORESTS, 1884-85.

		Protected Forests.							
Kámrúp Division ..	Kámrúp district ..	Jharikhuri	1,235	2	....	.....	1,235	2	
		Bura Gohain	620	1	....	.....	620	1	
		Mogakhal	180	...	....	.....	180	....	
Sibságar " ..	Sibságar " ..	Pauldehingia	19,200	30	....	.....	19,200	30	
Lakhimpur " .	Lakhimpur " ..	Bharolwah	5,280	8	....	.....	5,280	8	
		Kuddum	15,866	25	....	.....	15,866	25	
		Panapara	26,720	42	....	.....	26,720	42	
		Upper Dihing	151,584	237	....	.....	151,584	237	
		Dehingmukh	13,747	21	....	.....	13,747	21	
		Jokai	12,954	20	....	.....	12,954	20	
		Solaguri	68,122	106	....	.....	68,122	106	
Sylhet " ..	Sylhet " ..	Langai and Singla	108,800	170	....	.....	108,800	170	
Cachar " ..	Cachar " ..	North Cachar	128,000	200	....	.....	128,000	200	
		Total	552,308	862	....	.....	552,308	862	
		District Forests							
Goálpára " ..	Goálpára " ..	Within revenue limits.	141,930	222	....	.....	141,930	222	
Kámrúp " ..	Kámrúp " ..	" " "	322,592	504	....	461‡	322,131	503	
Darrang and Nowgong Division.	Darrang " ..	" " "	129,551	202	....	7,384§	122,167	191	
	Nowgong " ..	" " "	221,957	347	....	900‡	221,057	345	
Sibságar " ..	Sibságar " ..	" " "	232,606	365	....	1,105‡	232,501	363	
Lakhimpur " ..	Lakhimpur " ..	" " "	1,300,510	2,032	....	37‡	1,300,509	2,032	
Cachar " ..	Cachar " ..	" " "	50,175	78	....	442‡	49,753	78	
Sylhet " ..	Sylhet " ..	" " "	61,088	97	....	5,183‡	56,905	89	
Gáro Hills " ..	Gáro Hills " ..	Beyond " "	173,117	271	....	4,960‖	168,157	263	
Lakhimpur " ..	Lakhimpur " ..	" " "	960,000	1,500	....	.....	960,000	1,500	
Cachar " ..	Cachar " ..	" " "	135,040	211	....	.....	135,040	211	
Khási and Jaintia Hills Division.	Khási and Jaintia Hills district.	" " "	64,000	100	....	.....	64,000	100	
		" " "	315,328	493	....	.....	315,328	493	
Nága Hills " ..	Nága Hills " ..	Total	4,102,910	6,422	....	20,532	4,082,378	6,390	

* Rectification on re-measurement. † Rectification on re-measurement 7,181 acres, Notification No. 14, dated 19th June 1884, 5,760 acres.
‡ Waste land grants. § 5,760 acres declared reserve and 1,624 acres on account of waste land grants. ‖ Declared reserve.

FORM No. 50.

Forest Department, Assam.—Area of Plantations, 1884-85.

Division.	Name of Plantation.	On 1st April 1884.		Added during 1884-85.		On 31st March 1885.	
		Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.
Regular Plantations.		Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
Gáro Hills	Tura Cinchona nursery	.....	.....	.....	1,305	.....	1,305
	Total	.....	.....	.....	1,305	.....	1,305
	Kulsi Plantation.						
Kámrúp	Caoutchouc	122	9,154	26	918	148	10,072
	Teak	168	15,951	.....	553	168	16,504
	Sissu	20	2,350	.....	163	20	2,513
	Bamboo	2	312	.....	16	2	328
	Cinchona	.....	11	.....	.....	.....	11
	Add cost of nursery work	.....	426	.....	201	.....	627
	Collection and despatch of seed	.....	146	.....	72	.....	218
	Miscellaneous experiments in planting	.....	111	.....	311	.....	422
	Total	312	28,461	26	2,234	338	30,695
	Chardwar Plantation.						
Darrang and Nowgong	Caoutchouc	892	69,093	120	4,722	1,012	73,815
	Bamuni Hill Plantation.						
	Caoutchouc	9	2,032	.....	10	8*	2,042
	Total	901	71,125	120	4,732	1,020	75,857
	Makum Plantation.						
Lakhimpur	Teak	2	1,326	.....	.....	2	1,326
	Total	2	1,326	.....	.....	2	1,326
Khási and Jaintia Hills	Shillong timber plantation	8	3,665	.....	100	.....	3,765
	Total	8	3,665	.....	100	.....	3,765
	Total regular plantation	1,223	104,577	146	8,371	1,360	1,12,948
Cultural operations.							
Sibságar	Nambor timber plantation	73	5,156	28	1,460†	101	6,616
	Total cultural operations	73	5,156	28	1,460	101	6,616
	Grand Total	1,296	1,09,733	174	9,831	1,461	1,19,564

* One acre abandoned. †Charged under A VIII *f*.

FORM No. 51.

FOREST DEPARTMENT, ASSAM.—AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON OF 1885.

Division.	Forest tracts.	Up to 30th June 1884.		During dry season of 1885.				Total cost up to 30th June 1885.	Year in which protection commenced.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.		
	Goálpára District.	Acres.	Rs.	Acres.	Acres.	Acres.	Rs.	Rs.	
Goálpára	Sidli	15,044	7,516	33,334	1,142	31,182	2,107	9,923	1876-77
	Chirang	.....	135	.....	.....	.....	.....	135	"
	Guma	640	7,223	15,776	.....	15,776	1,430	8,653	"
	Panbari and Pechadaveri	2,650	269	3,250	150	3,100	134	403	1876-78
	Kámrúp District.								
Kámrúp	Barduar	12,400	5,463	12,400	.....	12,400	893	6,356	1873-74
	Pantan	10,961	2,534	10,961	.....	10,961	611	3,145	" "
	Matalkhar	1,780	2,258	1,780	.....	1,780	451	2,709	" "
	Kulsi	2,349	4,397	2,349	.....	2,349	901	5,298	" "
	Jara	830	1,439	830	.....	830	207	1,646	"
	Milmilia	2,710	1,436	2,710	30	2,680	225	1,661	1874-75
	Myang	4,800	77	4,850	.....	4,800	39	116	1883-83
	Bani	4,000	77	10,000	1,600	8,400	291	368	"
	Kawa Sing	3,260	155	3,260	200	3,060	185	340	"
	Singra Range	5,000	106	5,000	3,427	1,573	.....	106	"
	Hajo	.....	.....	226	226	.....	57	57	1884-85
	Darrang District.								
Darrang and Nowgong	Balipara	4,554	3,519	4,570	.....	4,570	253	4,072	1873-74
	Garamari	180	444	180	.....	180	37	481	1874-75
	Chardúar	892	311	892	.....	892	5	316	1876-79
	Bamoni Hill	9	169	8	.....	8	26	196	"
	Khalingdúar	13,196	3	13,212	320	12,892	7	10	1883-84
	Nowgong District.								
	Kholahát	1,878	1,534	1,878	4	1,874	290	1,824	1873-74
	Deboka	617	1,027	520	.....	520	170	1,197	"
	Dija	2,715	942	2,730	5	2,725	110	1,052	1879-80
	Khási and Jaintia Hills District.								
Khási and Jaintia Hills	Shillong	3,618	7,916	3,618	6	3,612	1,376	9,292	1874-75
	Riatkhwan	941	1,260	900	23	867	507	2,167	1881-82
	Total	94,914	51,319	134,224	7,133	127,091	10,302	61,321	

Charged in previous years	.. ..	50,042
Ditto in 1884-85	.. ..	9,990
Ditto in 1885-86 — Goálpára Division	.. ..	440
Ditto in 1885-86 — Kámrúp "	.. ..	784
Ditto in 1885-86 — Darrang and Nowgong Division	.. ..	64
Ditto in 1885-86 — Khási and Jaintia Hills "	.. ..	200
Total	.. .. ..	61,321

FORM No. 52.

FOREST DEPARTMENT, ASSAM.—PROSECUTIONS FOR BREACHES OF FOREST RULES DURING 1884-85.

Forest division and civil district.	Cases pending from 1883-84.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of the year.
		Injury to forest by fire	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Gáro Hills division— Gáro Hills district	1	....	8	....	3	11	12	4	31	....	....	4	31	8
Goálpára division— Goálpára district	....	3	1	....	1	5	5	3	10	....	....	3	10	2
Darrang and Nowgong division— Darrang district	....	2	1	....	....	3	3	1	5	2	4	3	9	....
Sibságar division— Sibságar district	6	....	3	....	....	3	9	7	10	2	4	9	14	....
Lakhimpur division— Lakhimpur district	3	....	19	....	....	19	22	10	34	9	35	19	69	3
Cachar division— Cachar district	2	....	5	....	4	9	11	8	11	3	10	11	21	....
Sylhet division— Sylhet district	....	....	....	....	4	4	4	3	7	1	1	4	8	....
Nága Hills division— Nága Hills district	....	....	1	....	....	1	1	1	1	....	....	1	1	....
Total	12	5	38	....	12	55	67	37	109	17	54	54	163	13

FORM No. 53.

Forest Department, Assam.—Summary of Revenue and Expenditure of the different divisions, 1884-85.

Budget heads.	Direction.	Gáro Hills Division.	Goálpára Division.	Kámrúp Division	Darrang and Nowgong Division.	Sibságar Division.	Lakhimpur Division.	Cachar Division.	Sylhet Division.	Khási and Jaintia Hills Division.	Nága Hills Division.	Total.
RECEIPTS.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency—												
a. Timber	.....	.....	.....	9 0 0	27 8 0	.....	.....	.....	.....	.....	.....	36 8 0
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	262 8 0	.....	.....	45 0 0	.....	.....	.....	.....	.....	.....	296 8 0
II.—Timber and other produce removed from the forest by consumers or purchasers.	.....	5,293 5 0	.....	.....	.....	.....	.....	5,232 12 0	2,903 4 0	.....	.....	11,236 5 0
a. Timber	.....	7,754 13 0	13,254 8 0	22,632 2 0	15,650 2 9	8,968 8 9	6,371 0 0	24,927 1 0	4,050 15 2	800 1 7	18 0 0	1,16,294 15 2
b. Firewood and charcoal	.....	.....	86 10 0	68 4 0	336 2 0	442 9 0	1,009 2 0	151 7 9	2 4 0	151 0 0	.....	2,313 6 9
c. Bamboos	.....	.....	.....	5 12 0	37 8 0	21 12 0	27 4 0	1,754 5 0	696 14 6	.....	.....	2,543 7 6
d. Grazing and fodder grass	.....	18 12 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	18 12 0
e. Other minor produce	.....	3 0 0	202 2 0	80 0 0	22,630 15 0	267 12 1	11,112 6 10	2,471 0 9	762 13 2	483 0 0	.....	38,962 2 11
III.—Confiscated drift and waif wood	.....	2 13 0	2 0 0	204 0 0	395 15 0	252 5 0	17 0 0	396 9 0	26 15 0	.....	.....	1,307 9 0
IV.—Revenue from forests not managed by Government—												
a. Duty on foreign timber and other forest produce	.....	.....	29 5 0	.....	.....	.....	4 0 0	2,720 7 6	.....	.....	.....	2,753 15 6
b. Revenue from shared and private forests	.....	638 8 0	.....	.....	.....	.....	.....	.....	.....	259 14 0	.....	898 6 0
V.—Miscellaneous—												
a. Fines and forfeitures	.....	.....	.....	231 7 0	67 8 0	19 0 0	17 0 0	5 0 0	9 10 0	.....	.....	439 9 0
b. Refunds	1 11 0	7 1 1	0 4 0	.....	.....	19 10 0	71 11 0	2 15 9	.....	.....	.....	104 4 10
c. Other sources	.....	6 0 0	674 13 3	369 11 4	38 0 0	427 7 0	539 4 0	549 13 0	13 0 0	57 7 0	.....	2,696 7 7
Total Receipts	1 11 0	13,967 13 1	14,901 13 3	23,719 4 4	39,124 10 9	10,426 11 10	19,161 11 10	39,922 7 9	8,816 11 11	1,649 6 7	18 0 0	1,80,413 5 4
EXPENDITURE.												
A.—Conservancy and Works.												
I.—Timber and other produce removed from the forests by Government agency—												
a. Timber	.....	2,315 9 3	.....	5 0 0	4 0 0	3 4 0	204 3 0	.....	.....	.....	.....	2,532 0 3
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	136 12 0	.....	.....	128 10 0	.....	.....	.....	.....	.....	.....	265 6 0
II.—Timber and other produce removed from the forests by consumers or purchasers.	.....	1,258 11 2	25 12 4	1,621 14 0	294 6 1	173 6 3	1,649 6 1	535 10 6	211 11 6	.....	.....	6,070 14 0
III.—Confiscated drift and waif wood	.....	.....	.....	7 0 0	.....	57 8 0	.....	3 15 0	.....	.....	.....	68 7 0
IV.—Revenue from forests not managed by Government—												
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—Rent of leased forests, and payments to shareholders in forests managed by Government.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VI.—Live-stock, stores, tools, and plant—												
a. Purchase of cattle	.....	.....	.....	.....	1,600 0 0	120 0 0	.....	.....	.....	.....	.....	1,720 0 0
b. Feed and keep of cattle	556 5 3	1,128 9 1	820 14 1	2,197 6 3	1,378 13 1	1,105 10 0	1,848 11 6	810 7 2	.....	.....	.....	9,646 12 6
c. Stores, tools, and plant	43 12 0	866 2 3	372 10 0	579 8 9	360 7 8	160 9 7	450 1 0	334 11 6	.....	21 14 0	.....	3,222 12 7
Carried over	600 1 3	5,627 11 10	1,219 4 5	4,410 13 0	3,866 4 8	1,620 5 10	3,952 5 7	1,485 12 3	211 11 6	21 14 0	.....	22,816 4 4

FORM No. 53.—(*Concluded.*)

Budget heads.	Direction.	Garo Hills Division.	Goalpára Division.	Kámrúp Division	Darrang and Nowgong Division.	Sibságar Division.	Lakhimpur Division.	Cachar Division.	Sylhet Division	Khási and Jaintia Hills Division.	Naga Hills Division.	Total.
	Rs. As. P	Rs. As. P	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As P	Rs. As. P.
Brought forward	600 1 3	5,627 11 10	1,219 4 5	4,410 13 0	3,666 4 8	1,620 5 10	3,962 5 7	1,485 12 3	211 11 6	21 14 0	.....	22,816 4 4
VII.—Communications and buildings—												
a. Roads and bridges	.....	6,349 15 6	.....	1,562 9 0	1,419 2 0	917 11 0	.....	2,702 4 6	.....	.....	.....	12,952 10 0
b. Buildings	.....	2,622 12 3	992 1 0	1,207 4 6	1,586 8 3	598 3 9	1,634 8 2	1,693 13 1	220 0 0	318 0 0	.....	10,875 3 0
c. Other works	.....	.....	.....	.....	14 13 0	.....	16 8 0	209 11 0	.....	.....	.....	241 0 0
VIII.—Demarcation, improvement, and extension of forests—												
a. Demarcation	.....	802 2 6	448 13 4	1,093 2 3	1,312 8 0	820 13 0	2,919 8 5	999 11 7	.....	84 14 0	.....	8,491 9 1
b. Compensation for land and rights	.....	525 0 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	525 0 0
c. Surveys and working plans	87 0 0	1,207 6 7	869 3 1	691 7 6	1,841 13 0	524 0 11	1,458 8 7	1,158 9 3	.....	.....	.....	7,803 0 11
d. Plantations	.....	1,304 9 6	.....	2,233 13 9	4,732 5 7	.....	.....	.....	.....	100 0 0	.....	8,370 12 10
e. Protection from fire	.....	.....	3,702 15 0	3,427 1 3	937 8 5	.....	.....	.....	.....	1,862 9 5	.....	9,930 2 1
f. Other works	475 2 4	24 0 0	388 7 11	866 3 0	624 7 9	2,901 14 3	587 8 8	1,379 8 6	525 7 7	290 1 6	.....	7,962 13 1
IX.—Miscellaneous—												
a. Refunds	.....	.....	.....	200 0 0	.....	124 2 0	613 4 0	.....	.....	.....	.....	937 6 0
b. Law charges	.....	32 0 0	.....	.....	.....	.....	70 0 4	112 9 3	.....	.....	.....	214 9 7
c. Other charges	250 0 3	298 14 6	923 11 2	511 7 0	465 6 0	298 11 9	304 15 6	567 1 3	.....	1 4 0	.....	3,621 7 5
Total A.—Conservancy and Works	1,382 3 10	18,794 8 8	8,544 7 11	16,203 13 3	16,600 12 8	7,815 14 6	11,552 2 10	10,210 0 8	957 3 1	2,678 10 11	.. ..	94,739 14 4
B.—Establishments.												
I.—Salaries—												
a. Conservators	14,683 11 3	.....	.....	800 0 0	.....	.....	.....	.....	.....	.....	.....	15,483 11 3
b. Superior officers	640 0 0	3,542 5 4	4,200 0 0	5,021 4 6	3,000 0 0	4,236 10 8	4,518 1 0	3,000 0 0	47 2 4	.....	.....	28,206 7 10
c. Subordinate forest and depôt establishments	600 0 0	3,177 12 6	4,041 11 6	4,195 11 11	3,799 2 6	4,050 0 8	2,598 6 8	3,494 12 8	62 13 8	1,464 0 0	.....	27,285 8 11
d. Office establishments	4,495 0 0	992 0 0	935 11 4	933 7 9	762 8 9	875 7 6	849 5 2	918 0 0	.....	.....	.....	10,761 8 6
e. Deputation and special allowances	.....	1,333 4 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,333 4 0
II.—Travelling allowances—												
a. Conservators	2,604 2 10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,604 2 10
b. Superior officers	.....	1,285 7 6	1,227 4 0	1,128 14 0	2,571 11 4	896 0 0	1,378 5 0	877 12 0	.....	.....	.....	9,367 5 10
c. Subordinate forest and depôt establishments	193 5 8	435 9 0	644 5 0	689 12 6	524 4 0	926 0 0	392 2 0	498 9 6	.....	.....	.....	4,303 15 8
d. Office establishments	11 8 9	3 2 0	.....	.....	.....	.....	5 1 9	.....	.....	.....	.....	19 12 6
III.—Contingencies—												
a. Stationery	.....	1 4 0	1 0 0	2 10 0	.....	2 8 0	1 11 0	10 8 0	.....	.....	.....	19 9 0
b. Carriage of tents and records	1 5 0	1 2 0	6 14 0	.....	.....	.....	52 11 0	1 0 0	.....	.....	.....	62 0 0
c. Rents, rates, and taxes	360 0 0	.....	.....	29 2 0	.....	27 0 0	36 0 0	.....	.....	.....	.....	451 2 0
d. Pay of police guards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Official postage	231 12 6	74 11 0	50 9 6	135 15 0	138 11 6	116 7 0	145 15 0	178 12 6	.....	.....	.....	1,072 14 0
f. Sundries	365 1 0	683 9 6	216 15 1	124 15 6	105 12 0	66 5 6	259 11 8	259 0 0	.....	7 2 0	.....	2,088 8 3
Total B.—Establishments	24,085 15 0	11,430 3 10	11,324 6 5	13,060 13 2	10,803 2 1	11,198 7 2	10,257 6 3	9,238 6 8	110 0 0	1,471 2 0	.. ..	1,02,959 14 7
Grand Total of expenditure	25,468 2 10	30,224 12 6	19,868 14 4	29,264 10 5	27,403 14 9	19,014 5 8	21,789 9 1	19,448 7 4	1,067 3 1	4,149 12 11	.....	1,97,699 12 11

CALCUTTA :
The 16th June 1885.

E. W. KELLNER,
Deputy-Comptroller-General (Forests).

FORM No. 54.

Dr. FOREST DEPARTMENT, ASSAM.—ACCOUNT CURRENT FOR THE YEAR 1884-85. *Cr.*

	Rs. As. P.	Rs. As. P.
To Cash balance	.....	2,169 3 8
„ Revenue as per Annual Summary (Form No. 53.)	.....	1,80,413 5 4
„ Service Funds— Uncovenanted Service Family Pension Fund, Bengal.	.....	571 7 10
Forest cash Remittance, Local— Remittances from State Treasuries..	1,95,733 0 9	.....
Inter-divisional transfers	16 10 8	1,95,749 11 5
„ Advances recoverable	.....	57,402 9 4
„ Suspense	.....	342 0 8
„ Account Current (other Governments)— Government of India	1,829 6 10	.....
Government of Bengal	235 7 0	.....
Government of North-Western Provinces and Oudh.	190 0 4	2,254 14 2
„ Inter-departmental transfers— Public Works Department (other Branches.)	1,384 7 5	.....
Civil Departments— Mathematical Instrument Department.	155 10 0	.....
Jails	886 4 0	.....
Police	856 13 7	.....
Law and Justice	60 0 0	3,323 3 0
Total....	.....	4,42,226 7 5

	Rs. As. P.	Rs. As. P.
By expenditure as per Annual Summary (Form No. 53.)	.....	1,97,699 12 11
„ Forest Cash Remittances, Local— Remittances to State Treasuries	1,74,675 2 10	
Inter-divisional transfers	16 10 8	1,74,691 13 8
„ Advances recoverable	.....	61,882 15 0
„ Suspense	.....	342 0 8
„ Inter-departmental transfers— Public Works Department, Kokilamukh State Railway.	150 8 0	.....
Ditto (other branches)	4,131 6 3	.....
Civil Department— Jails	60 9 7	.....
Miscellaneous	1,546 0 0	.....
Military Department, Bengal	273 8 0	.....
Telegraph Department	777 0 0	6,968 15 10
„ Cash balance	.....	1,240 13 6
Total..		4,42,226 7 5

DATED CALCUTTA: *The 16th June 1885.*

E. W. KELLNER, *Deputy-Comptroller-General (Forests).*

FORM No. 55.

FOREST DEPARTMENT, ASSAM.—OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1884-85.

Division.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P
Direction	....	1,101 10 8	1,101 10 8	660 0 0	761 10 8	1,411 10 8	310 0 0	.....
Gáro Hills division.	....	18,415 5 2	18,415 5 2	2,095 1 3	21,617 13 3	23,712 14 6	5,297 9 4	.....
Goálpára „	....	9,231 12 0	9,231 12 0	153 15 6	9,227 4 6	9,381 4 0	149 8 0	.....
Kámrúp	....	7,602 3 6	7,602 3 6	1,184 11 6	7,145 9 3	8,330 4 9	728 1 3	.....
Darrang and Nowgong division.	....	7,986 5 0	7,986 5 0	722 7 5	7,857 7 11	8,579 15 4	593 10 4	.....
Sibságar „	....	6,314 11 11	6,314 11 11	835 6 4	5,730 10 6	6,566 0 10	421 3 0	169 14
Lakhimpur „	....	4,738 8 0	4,738 8 0	3,631 10 11	7,179 2 8	10,810 13 7	6,072 5 7	.....
Cachar „	....	2,012 1 1	2,012 1 1	708 6 0	2,363 4 8	3,071 10 8	1,059 9 2	.....
Sylhet „	....	.....	.....	.....	.....	.....	.....	.....
Khási and Jaintia Hills division	....	.....	.....	.....	.....	.....	.....	.....
Nága Hills „	....	.....	.....	.....	.....	.....	.....	.....
Total ..	....	57,402 9 4	57,402 9 4	9,981 10 11	61,882 15 0	71,864 9 11	14,631 14 8	169 14 1

DATED CALCUTTA: *The 16th June 1885.*

E. W. KELLNER, *Deputy-Comptroller-General (Forests).*

FORM No. 56.

FOREST DEPARTMENT, ASSAM.—REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1884-85.

Division	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.
		Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P
Direction	Price of timber and other produce.	.....	1 11 0	1 11 0	1 11 0	.....
Gáro Hills division	Ditto ditto.	6,129 4 0	10,968 4 1	17,097 8 1	14,122 8 1	2,975 0 0
Goálpára	Ditto ditto.	11,690 0 0	13,768 13 3	25,458 13 3	14,301 13 3	11,157 0 0
Kámrup	Ditto ditto.	9,098 4 0	28,563 0 4	37,571 4 4	33,719 4 4	3,852 0 0
Darang and Nowgong	Ditto ditto.	.....	40,123 13 4	40,123 13 4	39,136 10 9	987 2 7
Sibságar	Ditto ditto.	.....	10,532 11 10	10,532 11 10	10,428 11 10	104 0 0
Lakhimpur	Ditto ditto.	228 0 0	18,923 11 10	19,151 11 10	19,151 11 10	.....
Cachar	Ditto ditto.	1,000 0 0	45,362 10 3	46,362 10 3	39,248 3 9	7,114 6 6
Sylhet	Ditto ditto.	1,931 4 0	7,371 15 11	9,303 3 11	8,815 11 11	487 8 0
Khasi and Jaintia Hills	Ditto ditto.	.....	1,839 6 7	1,839 6 7	1,649 6 7	190 0 0
Nága Hills	Ditto ditto.	.....	18 0 0	18 0 0	18 0 0	.....
	Total	29,986 12 0	1,77,474 2 5	2,07,460 14 5	1,80,593 13 4	26,867 1 1*

* From private parties.

	Rs. As. P.
Realisation as per Form No. 53	1,80,413 5 4
Reductions allowed in Chief Commissioner's No. 572 and 175, dated the 21st February 1885, and 20th January 1885 respectively.	180 8 0
	1,80,593 13 4

DATED CALCUTTA: *The 16th June 1885.*

E. W. KELLNER, *Deputy-Comptroller-General (Forests).*

FORM No. 57.

Forest Department, Assam.—Financial Results of the year 1884-85.

Division	Timber and other produce removed from the forests by Government agency		Other revenue.		Formation, protection, and improvement of forests.	Total	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs	Rs.	Rs.	Rs.	Rs.	Rs	Rs.
Direction	.....	.....	2	12,443	13,025	2	25,468
Gáro Hills	256	2,342	13,712	7,812	20,071	13,968	30,225
Goálpára	2	.....	14,300	6,910	12,959	14,302	19,869
Kámrúp	213	12	33,506	9,558	19,695	33,719	29,265
Darrang and Nowgong	377	133	38,759	6,971	20,300	39,136	27,404
Sibságar	252	61	10,177	6,542	12,411	10,429	19,014
Lakhimpur	17	204	19,135	8,281	13,305	19,152	21,790
Cachar	396	4	38,826	6,296	13,148	39,222	19,448
Sylhet	27	.....	8,789	267	800	8,816	1,067
Khási and Jaintia Hills	.....	.....	1,649	742	3,408	1,649	4,150
Nága Hills	.....	.....	18	.....	.....	18	.....
Total	1,540	2,756	1,78,873	65,822	1,29,122	1,80,413	1,97,700

FORM No. 58.

Forest Department, Assam.—Trees felled by Government Agency during the year 1884-85.

(*Selection fellings*).

Division.	Trees felled.	
	Description.	Number.
Gáro Hills	Sâl-trees	85
	Total	85
Kámrúp	Sâl-trees	25
	Reserved trees	6
	Total	31
Lakhimpur	Reserved trees	13
	Total	13
	Grand Total	129
	Abstract of the Circle.	
	Sâl	110
	Reserved trees	19
	Total	129

FORM No. 59.

FOREST DEPARTMENT, ASSAM.—OUTTURN OF TIMBER AND OTHER PRODUCE CUT AND COLLECTED BY GOVERNMENT AGENCY, DURING THE YEAR 1884-85.

Division.	Produce cut and collected.			
	How obtained.	Description.	Number or quantity.	Cubic feet.
Gáro Hills	Selection fellings...	Logs of sâl timber	85	.....
	By purchase	India-rubber..... Maunds	4-29-8	.....
	Drift.....	Logs of reserved timber	1	.....
		Bamboos	2,700	.....
		Total	86	.....
Kámrúp.....	Selection fellings ...	Logs of sâl timber	25	.....
		Boats of reserved "	6	.....
	Confiscation	" of sâl "	8	.....
		" of reserved "	7	.....
		" of unreserved "	5	.....
		Logs of reserved "	5	.....
		Posts of dead sâl "	56	.....
		Total	112	.....
Darrang and Nowgong.	By collection	Logs of reserved timber	22	.....
	Confiscation.	Ditto " "	6	.....
		Ditto unreserved "	10	.....
		Posts of " "	481	.....
		Planks of reserved "	40	.....
		Bamboos	122	.....
		Canes..... bundles	2,560	.....
		India-rubber..... maunds	1-1-8	.....
	Collection	Ditto ..... "	1-6-0	.....
		Total	559	.....
Sibságar.....	By collection	Logs of reserved timber	9	.....
	Drift	" " "	12	.....
		" unreserved "	22	.....
		Boats " "	2	.....
		Total	45	.....
Lakhimpur.....	Selection fellings ...	Logs of reserved timber	13	.....
		Total	13	.....
		Grand Total	815	.....
		Abstract of the Circle.		
		Logs of sâl timber	110	.....
		Ditto of reserved "	68	.....
		Ditto unreserved "	32	.....
		Boats of sâl "	8	.....
		Ditto reserved "	13	.....
		Ditto unreserved "	7	.....
		Posts of sâl "	56	.....
		Ditto unreserved "	481	.....
		Planks of reserved "	40	.....
		Bamboos	2,822	.....
		Canes..... Bundles	2,560	.....
		India-rubber..... Maunds	637	.....
		Total	815	.....

FORM No. 60.

FOREST DEPARTMENT, ASSAM.—TIMBER AND OTHER PRODUCE RECEIVED FROM FORESTS IN SALE DEPÔTS, DURING THE YEAR 1884-85.

Division.	Depôt.	Produce received.		
		Description.	Number or quantity.	Cubic feet.
Gáro Hills ...	Tura ...	Logs of sâl timber... ...	41	533
		Scantlings of „	242	650
		Planks of „	212	532
		Beams of „	32	85
		India-rubber (maunds) ...	4-29-8	.....
		Total ...	527	1,800
Kámrúp ...	Kulsi plantation ...	Boats of reserved timber ...	6	.....
		Total ...	6	.....
Darrang and Nowgong.	Tezpur ...	India-rubber (maunds) ...	1-6-0	.....
	Bhairabighat ...	Logs of reserved timber ...	22	.....
		Total ...	22	.....
Sibságar ...	Golághát ...	Logs of reserved timber ...	12	.....
		„ unreserved „ ...	22	.....
		Boats of „ „ ...	2	.....
		Total ...	36	.....
Lakhimpur ...	Dibrúgarh ...	Logs of reserved timber ...	13	249
		Total ...	13	249
		Grand Total ...	604	2,049
		Abstract of the Circle.		
		Logs of sâl timber... ...	41	533
		Scantlings of „	242	650
		Planks of „	212	532
		Beams of „	32	85
		Logs of reserved timber ...	47	249
		„ of unreserved „ ...	22	.....
		Boats of „ „ ...	2	.....
		„ of reserved „ ...	6	.....
		India-rubber (maunds) ...	5-35-8	.....
		Total ...	604	2,049

FORM No. 61.

FOREST DEPARTMENT, ASSAM.—SALES OF TIMBER AND OTHER PRODUCE CUT AND COLLECTED BY GOVERNMENT AGENCY DURING THE YEAR 1884-85.

Division.	Depôt or locality.	Produce sold.		
		Description.	Number or quantity.	Cubic feet.
		Sold from depôts.		
Gáro Hills	Tura	India-rubber (mds.)	4-9-0	.....
		Sold locally.		
		Log of reserved timber ...	1	.....
		Bamboos	2,700	.....
		Total ...	1	.....
		Sold from depôts.		
Kámrúp.....	Kulsi.....	Boats of reserved timber ...	3	.....
		Total ...	3	.....
		Sold locally.		
	„	Boat of sâl timber	3	.....
		„ of reserved timber ...	1	.....
	Pantan	„ of sâl timber	1	.....
		„ of unreserved timber ...	1	.....
	Barduar.....	„ of sâl timber	2	.....
		„ of reserved timber ...	2	.....
		„ of unreserved timber ...	4	.....
	Mayang.....	„ of reserved timber ...	2	.....
	Sikrabura	„ of sâl timber	1	.....
	Rani	„ of „ „	1	.....
		„ of reserved timber ...	1	.....
		Posts of dead sâl „ ...	52	.....
	Barduar district forest.	„ of „ „ ...	4	.....
	Bogai ditto ...	Logs of reserved „ ...	5	.....
	Luki ditto ...	Boat of „ „ ...	1	.....
		Total ...	81	.....
		Sold from depôts.		
Darrang and Nowgong.	Tezpur ...	India-rubber (mds.)	1-6-0	.....
	Bhairabighát.	Logs of reserved timber ...	22	.....
		Total ...	22	.....
		Sold locally.		
	District Forests.	Logs of reserved timber ...	6	.....
		„ of unreserved timber ...	10	.....
		Posts of „ „ ...	481	.....
		Planks of reserved „ ...	40	.....
		Bamboos	122	.....
		Canes (bundles)	2,560	.....
		India-rubber (Mds.)	1-1-8	.....
		Total ...	537	.....
		Sold from depôts.		
Sibságar ...	Golághát ...	Logs of reserved timber ...	12	.....
		„ of unreserved timber ...	22	.....
		Boats of „ „ ...	2	.....
		Total ...	36	.....

FORM No. 61.—(*Concluded*).

Division.	Depôt or locality.	Produce sold.		
		Description.	Number or quantity.	Cubic feet.
		Sold locally.		
	Nambor ...	Logs of reserved timber ...	9	.....
		Total ...	9	.....
		ABSTRACT OF THE CIRCLE.		
		Sold from depôts.		
		Logs of reserved timber ...	34	.....
		Boats of " " ...	3	.....
		" of unreserved timber ...	2	.....
		Logs of " " ...	22	.....
		India-rubber (mds.) ...	5-15-0	.....
		Total ...	61	.....
		Sold locally.		
		Logs of reserved timber ...	21	.....
		" of unreserved timber ...	10	.....
		Boats of sâl timber	8	.....
		" of reserved timber ...	7	.....
		" of unreserved timber ...	5	.....
		Posts of " " ...	481	.....
		" of dead sâl " ...	56	.....
		Planks of reserved " ...	40	.....
		Bamboos	2,822	.....
		Canes (bundles)	2,560	.....
		India-rubber (mds.)	1-1-8	.....
		Total ...	628	.....

FORM No. 62.

FOREST DEPARTMENT, ASSAM.—ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1884-85.

Particulars.	Number or quantity.	Cubic feet.	Total of each head.	
			Number or quantity.	Cubic feet.
BALANCE AT COMMENCEMENT OF YEAR.				
GÁRO HILLS DIVISION—				
Logs of sâl timber	41	237		
Scantlings of sâl timber	97	319		
Planks of "	49	90	187	646
KÁMRÚP DIVISION—				
Boats of reserved timber	5	.....	5	.....
Total balance	.....	.....	192	646
Received from the forests in depôts.				
Logs of sâl timber	41	533		
Scantlings of sâl timber	242	650		
Planks of "	212	532		
Beams of "	32	85		
Logs of reserved timber	47	249		
" of unreserved "	22	.....		
Boats of " "	2	.....		
" of reserved "	6	.....		
India-rubber Mds.	5-35-8	.....	604	2,049
Received from the forests and sold locally.				
Total timber (detailed in Form No. 61)	628	.....		
Bamboos	2,822	.....		
Canes Bdls.	2,560	.....		
India-rubber Mds.	1-1-8	.....	628	.....
Total	.....	.....	1,424	2,695

FORM No. 62.—(*Concluded.*)

Particulars.	Number or quantity.	Cubic feet.	Total of each head.	
			Number or quantity.	Cubic feet.
Removed by purchasers from depôts.				
Logs of reserved timber	34	.....		
„ of unreserved „	22	.....		
Boats of „ „	2	.....		
„ of reserved „	3	.....		
India-rubber..... ..... Mds.	5-15-0	.....	61	.....
Sold locally.				
Total timber (detailed in Form No. 61)	628	.....		
Bamboos	2,822	.....		
Canes ..... Bdls.	2,560	.....		
India-rubber..... Mds.	1-1-8	... .	628	.....
Used by the Department.				
Logs of sâl timber	82	770		
Scantlings „ „	336	961		
Planks „ „	261	622		
Beams „ „	32	85		
Logs of reserved „	13	249	724	2,687
Lost or written off as useless.				
Boat of reserved timber	1	.....		
India-rubber..... ..... Mds.	0-5-8	.....	1	.....
BALANCE AT CLOSE OF THE YEAR.				
GÁRO HILLS DIVISION—				
Scantlings of sâl timber	3	8		
India-rubber..... Mds.	0-15-0	.....	3	8
KÁMRÚP DIVISION—				
Boats of reserved timber	7	.....	7	.....
Total	.....	.....	1,424	2,695

FORM No. 63.

FOREST DEPARTMENT, ASSAM.—TIMBER AND OTHER PRODUCE CUT, COLLECTED, AND REMOVED FROM THE FORESTS, BY CONSUMERS OR PURCHASERS, INCLUDING PASTURES, DURING THE YEAR 1884-85.

Division.	Produce removed.		Amount of revenue.	Amount actually realised during the year.
	Description.	Number or quantity.		
	District Forests.		Rs.	Rs.
Gáro Hills	Sâl-trees	131	1,311	741
	Reserved trees	203	1,282	724
	Unreserved trees	135	268	180
	Total	469	2,861	1,645
	Dead wood	1,541	1,458	1,458
	Dugouts	911	381	381
	Foreign passes	2,073	4,184	4,184
	Gáro passes	1,388	520	520
	Grazing dues	.....	19	19
	Miscellaneous minor produce	.....	3	3
	Total revenue during the year	.....	9,426	8,210
	Add—Revenue realised on account of outstandings of previous years.	.....	.....	4,860
	Total revenue under II.	.....	.....	13,070
	Reserved Forests.			
Goálpára	Sâl-trees	1,064	10,640	3,845
	Reserved trees	157	942	446
	Unreserved trees	59	218	161
	Total	1,280	11,800	4,452
	Poles or saplings	525	33	33
	Dead wood (Sâl)	929	519	519
	" " (other wood).....	62	52	52
	Dugouts (Sâl)	4	33	33
	" (other wood)	8	36	36
	Firewood permits (annual).....	1	9	9
	Charcoal ..... Mds.	50	6	6
	Canes ..... Bndls.	26,019	195	195
	Trade permits	40	20	20
	Total revenue under Reserved Forests...	.....	12,703	5,355
	District Forests.			
	Reserved trees	4	24	24
	Unreserved trees	77	305	200
	Total	81	329	224
	Dead wood (Sâl)	8	2	2
	Charcoal ..... Mds.	159	20	20
	Canes..... Bndls.	400	3	3
	Trade permits	10	5	5
	Total revenue during the year.....	.....	13,062	5,609
	Add—Revenue realised on account of outstandings of previous years.	.....	.....	7,986
	Total revenue under II.	.....	.....	13,595

FORM No. 63.—(*Continued.*)

Division.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realised during the year.
	Reserved Forests.		Rs.	Rs.
Kámrúp	Sâl-trees	1,580	15,800	10,272
	Reserved trees	139	834	575
	Unreserved trees	51	149	115
	Total	1,770	16,783	10,962
	Dead wood	5,938	2,124	2,124
	Bamboos	356	6	6
	Pass-fees	.....	15	15
	Trade permits	.....	368	368
	Miscellaneous minor produce	.....	42	42
	Total revenue under Reserved Forests	.....	19,338	13,517
	District Forests.			
	Sâl-trees	742	7,420	6,458
	Reserved trees	51	306	306
	Unreserved trees	78	197	194
	Total	871	7,923	6,958
	Dead wood	385	239	239
	Firewood permits.....	.....	39	39
	Charcoal ..... Mds.	234	29	29
	Lac-mahâls	.....	20	20
	Miscellaneous minor produce	.....	27	27
	Total revenue during the year	.....	27,615	20,829
	Add—Revenue realised on account of outstandings of previous years.	.....	.....	11,966
	Total revenue under II.	.....	.....	32,795
	Reserved Forests.			
Darrang and Nowgong.	Sâl-trees	32	320	320
	Reserved trees	95	570	570
	Unreserved trees	754	1,517	1,517
	Total	881	2,407	2,407
	Dead wood (Sâl).....	12	10	10
	Posts („)	4	2	2
	Canes ..... Bndls.	2,464	18	18
	Pass-fees	48	24	24
	Trade permits	20	10	10
	Firewood permits (monthly)	3	3	3
	Total revenue under Reserved Forests...	.....	2,474	2,474
	District Forests.			
	Sâl-trees	22	220	220
	Reserved trees	657	3,794	3,794
	Unreserved trees	852	1,689	1,689
	Total	1,531	5,703	5,703

FORM No. 63—(*Continued.*)

Division.	Produce removed.		Amount of revenue.	Amount actually realised during the year.
	Description.	Number or quantity.		
			Rs.	Rs.
Darrang and Nowgong.—(*Concluded.*)	Sâl-posts	15	8	8
	Poles	40	3	3
	Miscellaneous planks and pieces	99	61	61
	Posts	104	42	42
	Bamboos	1,985	38	38
	Rubber-maháls	.....	22,380	22,380
	Lac "	.....	55	55
	Canes ... Bndls.	22,785	171	171
	Charcoal ... Mds.	2,381	298	298
	Trade permits	347	174	174
	Firewood permits (annual)	2	18	18
	" " monthly)	7	7	7
	Pass-fees	109	54	54
	Timber on land allotted for cultivation	.....	8,156	7,169
	Total revenue under II.	.....	39,642	38,655
	Reserved Forests.			
Sibságar	Reserved trees	69	414	414
	Unreserved trees	604	1,266	1,266
	Total	673	1,680	1,680
	Dead wood	30	45	45
	Saplings	1,755	110	110
	Firewood permits (monthly)	77	77	77
	" " (annual)	1	9	9
	Bil grass	.....	100	100
	Canes ... Bndls.	9,500	74	74
	Boat	1	6	6
	Charcoal ... Mds.	636	80	80
	Trade permits	52	26	26
	Total revenue under reserved forests	.....	2,207	2,207
	District Forests.			
	Reserved trees	374	2,244	2,244
	Unreserved trees	534	868	868
	Total	908	3,112	3,112
	Dead wood	2	5	5
	Saplings	1,234	78	78
	Boats	115	354	354
	Firewood permits (monthly)	159	159	159
	" " (annual)	4	36	36
	Charcoal ... Mds.	827	104	104
	Bamboos	2,025	26	26
	Canes ... Bndls.	16,509	122	122
	Lac-mahál	.....	12	12
	Trade permits	126	63	63
	Timber on land allotted for cultivation	.....	3,432	3,432
	Total revenue under II.	.....	9,710	9,710
	District Forests.			
Lakhimpur	Reserved trees	482	2,871	2,871
	Unreserved trees	1,407	2,861	2,861
	Total	1,889	5,732	5,732

FORM No. 63.—(*Continued.*)

Division.	Produce removed. Description.	Number or quantity.	Amount of Revenue.	Amount actually realised during the year.
			Rs.	Rs.
Lakhimpur.—(*Concluded.*)	Boats	45	143	143
	Sleepers	100	9	9
	Firewood permits (monthly)	488	488	488
	Charcoal ... Mds.	4,010	503	503
	Bamboos	1,275	27	27
	Canes ... Bndls.	91,350	854	854
	India-rubber	.....	166	166
	Rubber-mahâls	.....	10,080	10,080
	Trade permits	289	144	144
	Timber on land allotted for cultivation	.....	139	139
	Total Revenue during the year	.....	18,285	18,285
	Add revenue realised on account of outstandings of previous years.	.....	.....	228
	Total revenue under II.	.....	.....	18,513
	Reserved Forests.			
Cachar	First-class timber ... C. ft.	22,060	5,515	4,628
	Second-class „ ... „	12,560	2,355	1,216
	Third-class „ ... „	151,216	9,451	9,365
	Converted „ ... „	243	47	41
	Total	186,079	17,368	15,250
	Firewood ... Mds.	3,499	109	109
	Bamboos	426,275	1,066	1,066
	Canes ... Bndls.	14,617	914	914
	Rubber-mahâls	.....	600	300
	Grass and reeds ... Bndls.	2,800	6	6
	Agar ... baskets.	13	19	19
	Permit and pass fees	.....	2,415	2,412
	Total revenue under Reserved Forests	.....	22,497	20,076
	Protected Forests.			
	Dugouts	200	560	532
	Miscellaneous pieces	1,213	112	112
	Poles	52	3	3
	Bamboos	3,987	40	40
	Grass and reeds ... Bundles.	500	2	2
	Trade permits	.....	90	90
	Total revenue under Protected Forests	.....	807	779
	District Forests.			
	First-class timber ... C. ft.	12,080	3,020	2,683
	Second-class „ ... „	6,997	1,312	1,292
	Third-class „ ... „	43,680	2,730	2,579
	Converted „ ... „	767	85	85
	Total	63,524	7,147	6,639

FORM No. 63.—(*Concluded.*)

Division.	Produce removed. Description.	Number or quantity.	Amount of Revenue.	Amount actually realised during the year.
			Rs.	Rs.
Cachar.—(*Concluded.*)	Firewood ..... Mds.	1,306	41	41
	Charcoal ..... „	10	1	1
	Bamboos	103,500	259	259
	Canes ..... bundle.	3,967	248	248
	Grass and reeds ..... „	126,090	36	36
	Agar ..... baskets.	7	11	11
	Rubber-mahâls	.....	1,100	550
	Sungrass mahâl	.....	415	415
	Permit and pass-fees	.....	735	731
	Timber on land allotted for cultivation	.....	8,348	4,751
	Total revenue under District Forests ...	.....	18,341	13,682
	Grand Total	.....	41,645	34,537
	Add revenue realised on account of outstandings of previous years.	.....	.....	1,000
	Total revenue under II.	.....	.....	35,537
	Protected and District Forests.			
Sylhet.	First-class timber (rough) ...cubic feet	3,604	901	901
	„ „ „ (converted) ... „	160	50	50
	Second „ „ („) ... „	46	11	11
	„ „ „ (rough) ... „	4,853	910	910
	Third „ „ („) ... „	11,965	748	748
	„ „ „ (converted) ... „	1,294	101	101
	Total	21,922	2,721	2,721
	Agar ..... baskets.	10	15	15
	Firewood ..... Mds.	104	3	3
	Bamboos	278,763	697	697
	Canes ..... bundles.	6,282	393	393
	Reeds ..... „	1,752	55	55
	Thatching-grass ..... „	95,437	238	238
	Leaves (dals)	19,000	12	12
	Trade permits	585	585	585
	Home-consumption permits	252	126	126
	Passes for forest produce	.....	957	957
	Timber on land allotted for cultivation ...	.....	1,520	1,520
	Total revenue during the year	.....	7,322	7,322
	Add revenue realised on account of outstandings of previous years.	.....	.....	1,444
	Total revenue under II.	.....	.....	8,766
	District Forests.			
Khási and Jaintia Hills.	Sâl-trees	2	20	20
	Reserved trees	5	30	30
	Total	7	50	50

FORM No. 63.—(*Concluded.*)

Division.	Produce removed.		Amount of revenue.	Amount actually realised during the year.
	Description.	Number or quantity.		
			Rs.	Rs.
Khási and Jaintia Hills.—(*Concluded.*)	Dead wood	4,791	218	218
	Rubber-mahal	.....	350	350
	Cassia „	.....	320	320
	Grass (bundles)	361	25	25
	Other minor produce	.....	40	20
	Trade permits	68	68	68
	Home consumption permits	362	181	181
	Total revenue under II	.....	1,252	1,232
	District Forests.			
Nága Hills	Reserved trees	3	18	18
	Total revenue under II	.....	18	18
	Total revenue of the Circle under II	.....	.....	1,71,891

FORM No. 65.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1884-85.

Description of timber and other produce	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
	Number.	C. feet.	Value.	Number.	C. feet.	Value.	In favour of the year.	Against the year.
GARO HILLS DIVISION.			Rs.			Rs.	Rs.	Rs.
Logs	41	237	592	....	.....	.....	.....	592
Planks and scantlings.	146	409	1,023	3	8	20	.....	1,003
India-rubber	... ..	.....	.....	15 srs	.....	22	22	... ..
Total.....	187	646	1,615	3	8	42	22	1,595
KÁMRÚP DIVISION.								
Boats	5	.....	100	7	.....	130	30	.....
Total	5	.....	100	7	.. ...	130	30	.....
Grand Total	.....	.....	1,715	.....	.....	172	.....	1,543

FORM No. 65.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1884-85.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
DIRECTION.						
Stores, Tools, and Plant.		Rs.		Rs.		
Surveying and other instruments	23	333	12	250	.....	83
Tools	12	25	21	33	8	.....
Office furniture	60	1,146	61	1,100	.....	46
Tents	1	185	1	185	.....	.....
Miscellaneous	.....	557	.....	368	11	.....
Buildings.						
Out-houses	4	175	4	150	.....	25
Live-stock.						
Elephants	2	4,000	2	4,000	.....	.....
Total	.....	6,221	.....	6,086	19	154
GÁRO HILLS DIVISION.						
Stores, Tools, and Plant.						
Surveying and other instruments	45	419	45	419	.....	....
Tools	81	129	5,864	526	397	....
Office furniture	19	825	20	900	75	....
Miscellaneous	.....	394	.....	507	113	....
Live-stock.						
Elephants	1	1,800	2	3,800	2,000	.....
Bullocks	2	125	2	125	.....	.....
Total	.....	3,692	.....	6,277	2,585	.....
GOÁLPÁRA DIVISION.						
Stores, Tools, and Plant.						
Surveying and other instruments	104	492	74	441	.....	51
Tools	465	817	459	759	.....	58
Office furniture	55	1,025	67	1,123	98	.....
Tents	1	215	1	150	.....	65
Miscellaneous	.....	1,074	.....	1,027	.....	47
Buildings.						
Dhubri bungalow and inspection houses	3	8,200	1	8,000	.....	200
Other houses	16	590	27	1,240	650	.....
Live-stock.						
Elephants	2	3,800	2	3,800	.....	.....
Bullocks	2	100	2	100	.....	.....
Total	.....	16,313	.....	16,640	748	421

FORM No. 65.—(*Continued*).

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
KÁMRÚP.		Rs.		Rs.		
Stores, Tools, and Plant.						
Surveying and other instruments	48	236	49	258	22	.....
Tools	347	697	365	618	.....	79
Office furniture	44	778	57	906	128	.....
Tents	1	45	1	40	.....	5
Miscellaneous	.....	1,524	.....	1,624	100	.....
Buildings.						
Kúlsi plantation bungalow	1	3,325	1	3,200	.....	125
Gauháti bungalow	1	5,658	1	5,658	.....	.....
Other houses	61	908	60	988	80	.....
Live-stock.						
Elephants	6	8,600	4	4,900	.....	3,700
Bullocks	4	310	4	310	.....	.....
Total	.....	22,081	.....	18,502	330	3,909
DARRANG AND NOWGONG DIVISION.						
Stores, Tools, and Plant.						
Surveying and other instruments	31	255	38	335	80	.....
Tools	469	500	482	650	150	.....
Office furniture	90	700	96	800	100	.....
Tent	1	10	2	108	98	.....
Miscellaneous	.....	500	.....	538	38	.....
Buildings.						
Bhairabighát bungalow and inspection houses.	3	3,800	3	3,800	.....	.....
Other houses	40	600	40	600	.....	.....
Live-stock.						
Elephants	2	1,700	3	3,600	1,900	.....
Total	.....	8,065	.....	10,431	2,366	.....
SIBSÁGAR DIVISION.						
Stores, Tools, and Plant.						
Surveying and other instruments	28	90	29	90	.....	.....
Tools	462	687	467	695	8	.....
Office furniture	51	600	45	566	.....	34
Tents	2	65	2	65	.....	.....
Miscellaneous	.....	250	.....	544	294	.....
Buildings.						
Sibságar bungalow	1	5,000	1	5,000	.....	.....
Golághát bungalow and inspection houses	5	4,800	5	4,800	.....	.....
Other houses	15	400	15	400	.....	.....
Live-stock.						
Elephants	3	4,300	2	2,300	.....	2,000
Bullocks	2	30	2	120	90	.....
Total	.....	16,222	.....	14,580	392	2,034

FORM No. 65.—(*Concluded.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
Lakhimpur Division.		Rs		Rs.		
Stores, Tools, and Plant.						
Surveying and other instruments	48	578	52	659	81	.....
Tools	198	408	198	408	.....	.....
Office furniture	35	484	45	524	40	.....
Tents	5	626	5	626	.....	.....
Miscellaneous	.....	694	.....	894	200	.....
Buildings.						
Lakhimpur bungalow	1	4,378	1	8,510	4,132	.....
Other houses	13	1,102	21	1,810	708	.....
Live-stock.						
Elephants	2	3,000	3	5,000	2,000	.....
Total	.....	11,270	.....	18,431	7,161	.....
Cachar Division.						
Stores, Tools, and Plant.						
Surveying and other instruments	30	642	30	605	.....	37
Tools	273	660	273	627	.....	33
Office furniture	103	1,065	106	1,201	136	...
Tents	1	70	1	70	.....	...
Miscellaneous	.....	678	.....	842	164	...
Buildings.						
Divisional and office bungalows, revenue stations, and inspection houses.	7	8,975	8	9,575	600	.....
Other houses	76	1,636	38	1,596	.....	40
Live-stock.						
Elephant	1	600	1	600	.....	.....
Total	.....	14,326	.....	15,116	900	110
Sylhet Division.						
Survey and other instruments	1	5	1	5	.....	.....
Tools	8	40	8	40	.....	.....
Miscellaneous	.....	20	.....	30	10	.....
Buildings.						
Small houses	.....	.....	6	220	220	.....
Total	.....	65	.....	295	230	.....
Khasi and Jaintia Hills Division.						
Stores, Tools, and Plant.						
Tools	54	101	81	121	20	.....
Miscellaneous	.....	16	.....	16	.....	.....
Buildings.						
Small houses	3	200	4	330	130	.....
Total	.....	317	.....	467	150	.....
Total for the Circle	.....	98,572	.....	1,06,825	14,881	6,628

Net difference in favour of the year Rs. 8,253.

SHILLONG:
The 15th August 1885.

GUSTAV MANN,
Conservator of Forests, Assam.

Appendix I.

Register of Reserved Forests in the Province of Assam, added during 1884-85.

GARO HILLS FOREST DIVISION.

GÁRO HILLS DISTRICT.

XV.—The Dambu Forest Reserve.—Notified in the *Assam Gazette* of the 14th of March 1885, page 108, situated in Mauza No. 4.

(*1*) *Area.*—7·75 square miles, or 4,960 acres.

(*2*) *Boundaries*—

North.—A survey line running from boundary-mound No. 9 in an easterly direction to boundary-mounds Nos. 10, 11, 12, 13, 14, and 15, the latter on the right bank of the Rongan river.

East.—From boundary-mound No. 15, on the right bank of the Rongan river, across the latter and along a *bil*, which extends from this to beyond Darugiri to boundary-mound No. 1.

South.—A survey line running from boundary-mound No. 1 in a westerly direction to boundary-mound No. 2.

West.—A survey line running from boundary-mound No. 2 in a north-westerly direction to boundary-mound No. 3; thence in a south-westerly direction to boundary-mound No. 4; thence in a northerly direction to boundary-mounds Nos. 5 and 6, the latter on the right bank of the Mijol river; thence along the right bank of this, the Rongan and Chichura rivers, to the junction with the Boldagaljhora, and up the latter to boundary-mound No. 7; thence a survey line running in a north-westerly direction to boundary-mound No. 8, and in a north-easterly direction across the Chichura river to boundary-mound No. 9.

(*3*) *Soil.*—A clay largely mixed in places with decomposed gneiss and other rock and vegetable mould on the surface.

(*4*) *Description of forest.*—Chiefly mature Sâl with extensive patches of evergreen or deciduous trees intervening.

(*5*) *Timber depôts.*—Mornai, Goálpára, and Dhubri.

(*6*) *Timber markets.*—Mornai, Goálpára, Dhubri, and Eastern Bengal generally.

(*7*) *Lines of export.*—The Dudnai and Brahmaputra rivers.

(*8*) *List of villages or private lands remaining within the forest boundaries.*—None.

(*9*) *Rights of surrounding population.*—None.

(*10*) *Maps.*—A map on the scale of four inches to the mile is filed in the office of the Gáro Hills division and that of the Conservator.

(*11*) *Working plan.*—The detail examination of this forest was commenced in March 1885, but had to be discontinued almost immediately on account of the severe illness of the officer in charge; it will be proceeded with in the working season of 1885-86.

DARRANG AND NOWGONG FOREST DIVISION.

DARRANG DISTRICT.

IX.—An addition to the Charduár Reserve.—Notified in the *Assam Gazette* of the 21st of June 1884, page 307, situated in the Bálipára mauza.

(*1*) *Area.*—9 square miles, or 5,760 acres.

(*2*) *Boundaries*—

North.—The present southern boundary-line of the Charduár reserve between the Belsiri river and the Deputa river.

East.—The Deputa river.

South.—The Daimara road.

West.—The Belsiri river.

(*3*) *Soil.*—A very rich sandy loam between the Diputa and the Gabru rivers, but less rich between the Gabru and the Belsiri rivers.

(*4*) *Description of the Forest.*—Lower hill forest, Nahor almost pure between the Borjuli and Gabru rivers, and scattered more or less thickly between the Diputa and Borjuli rivers. Caoutchouc-trees scarce.

(*5*) *Timber depôts.*—Bhairabighat and Tezpur.

(*6*) *Timber markets.*—The towns of Tezpur, Gauháti, Dhubri, and the Province in general.

(*7*) *Lines of export.*—The Diputa, Gabru, Belsiri, and the Brahmaputra rivers.

(*8*) *List of villages or private lands remaining within the forest boundaries.*—None.

(*9*) *Rights of surrounding population.*—None.

(*10*) *Maps.*—A map on the scale of one inch to the mile has been filed in the Direction Office, and that of the Darrang and Nowgong division.

(*11*) *Working plan.*—There is none. Nothing more than protection against destruction by temporary cultivation is contemplated at present.

Appendix II.

STATEMENT SHOWING THE CLEARING OF BOUNDARY-LINES AND REPAIRING OF BOUNDARY-MOUNDS AND THE INSPECTION DONE BY THE DIVISIONAL OFFICER IN EACH RESERVED AND PROTECTED FOREST DURING THE YEAR 1884-85.

Names of divisions and forests.	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1884-85.		Length of artificial boundaries and demarcated natural boundaries not cleared in 1884-85.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1884-85.	Total number of boundary-marks not repaired in 1884-85.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.		Total length of artificial boundaries and demarcated natural boundaries not inspected by the Divisional Officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
GARO HILLS DIVISION.													
Dibru Hill	7	10	....	....	7	10	9	....	9	....	....	7	10
Jinari	8	45	8	45	....	....	5	5	....	8	45	....	....
Chima and Bangshi	15	61	15	61	....	....	30	30	....	15	61	....	....
Dhima	9	25	9	25	....	....	18	18	....	9	25	....	....
Dilma	2	45	2	45	....	....	10	10	....	....	....	2	45
Raja Simla	9	44	9	44	....	....	5	5	....	....	....	9	44
Ildek	9	18	9	18	....	....	10	10	....	....	....	9	18
Dambu	8	25	8	25	....	....	15	15	....	8	25	....	....
Daragiri	5	18	5	18	....	....	10	10	....	....	....	5	18
Rangrongiri	12	52	....	....	12	52	16	....	16	....	....	12	52
Emangiri	4	5	....	....	4	5	11	....	11	....	....	4	5
Rewak	3	55	....	....	3	55	6	....	6	....	....	3	55
Siju	2	22	....	....	2	22	6	....	6	....	....	2	22
Tura	1	15	1	15	....	....	8	8	....	1	15	....	....
Bolsalgiri	2	32	2	32	....	....	9	9	....	2	32	....	....
Total	101	72	72	8	29	64	168	120	48	45	43	56	29
GOALPARA DIVISION.													
Bijni Duár	13	60	....	....	13	60	52	....	52	....	....	13	60
Chirangdnar (eastern part)	3	....	3	....	....	....	9	9	....	3	....	....	....
Ditto (western ")	5	35	5	35	....	....	26	26	....	5	35	....	....
Ripu Duar	5	....	5	....	....	....	19	19	....	5	....	....	....
Guma Duár	6	....	6	....	....	....	38	38	....	6	....	....	....
Sidli "	27	....	27	....	....	....	143	143	....	27	....	....	....
Panbari and Pechadaveri	8	10	8	10	....	....	40	40	....	8	10	....	....
Bengtol and Darogaon	3	60	3	60	....	....	17	17	....	3	60	....	....
Bhumeswar Hill	11	10	11	10	....	....	57	57	....	11	10	....	....
Total	83	15	69	35	13	60	401	349	52	69	35	13	60
KAMRUP DIVISION.													
Bar Duár reserve	56	45	56	45	....	....	197	197	....	54	55	13	....
Pantan ditto	51	10	51	10	....	....	131	131	....	33	10	18	70
Mataikhar ditto	8	52	8	52	....	....	63	63	....	8	52	....	....
Kulsi plantation reserve	16	5	16	5	....	....	37	37	....	16	5	....	....
Jara reserve	6	20	6	20	....	....	28	28	....	6	20	....	....
Milmillia reserve	24	35	24	35	....	....	124	124	....	22	20	2	15
Mayang ditto	40	60	40	60	....	....	193	193	....	21	30	19	30
Kawa Sing reserve	16	8	16	8	....	....	68	68	....	13	....	3	8
Simla Hill ditto	4	50	4	50	....	....	23	23	....	4	50	....	....
Dumpara ditto	5	60	5	60	....	....	34	34	....	5	60	....	....
Khaksi Sikrabura Hill reserve	18	....	18	....	....	....	140	132	8	18	....	....	....
Ghoraputa reserve	3	30	3	30	....	....	26	25	1	3	30	....	....
Khatkhati Hill reserve	8	60	8	60	....	....	53	52	1	8	60	....	....
Tarcibari reserve	7	....	7	....	....	....	50	38	12	7	....	....	....
Garubaldha reserve	3	30	3	30	....	....	22	20	2	3	30	....	....
Khurkhuri ditto	2	40	2	40	....	....	20	20	....	2	40	....	....
Suruuria Hill reserve	6	....	6	....	....	....	29	25	4	6	....	....	....
Gizang reserve	5	....	5	....	....	....	35	32	3	5	....	....	....
Jaipur ditto	7	21	7	21	....	....	48	47	1	7	21	....	....
Baradobha reserve	7	20	7	20	....	....	46	46	....	7	20	....	....
Mampathar ditto	5	60	5	60	....	....	30	30	....	5	60	....	....
Barjuli reserve	9	....	9	....	....	....	45	31	14	9	....	....	....
Hajo ditto	2	64	2	64	....	....	19	19	....	....	....	2	64
Mairakanda reserve	14	70	14	70	....	....	83	83	....	11	60	3	10
Kukurmara depôt	1	8	1	8	....	....	12	12	....	1	8	....	....
Chaygaon forest	20	52	20	52	....	....	150	150	....	20	52	....	....
Buragohain protected forest	4	47	2	53	1	74	30	....	30	....	....	4	47
Mogakhal ditto ditto	1	68	1	68	....	....	14	14	....	1	68	....	....
Jharikhuri ditto ditto	8	65	5	66	2	79	55	....	55	....	....	8	65
Chaygaon proposed reserve	20	52	20	52	....	....	150	150	....	20	52	....	....
Total	388	72	383	79	4	73	1,955	1,824	131	326	3	63	69
DARRANG AND NOWGONG DIVISION													
Kholahat Reserve	7	38	7	38	....	....	160	160	....	7	38	....	....
Deboka "	6	38	6	38	....	....	22	22	....	6	38	....	....
Diju "	11	56	11	56	....	....	262	262	....	11	56	....	....
Bálipara "	2	40	2	40	....	....	49	49	....	2	40	....	....
Khaling Duár "	8	....	8	....	....	....	104	104	....	8	....	....	....
Chardnar plantation "	17	10	17	10	....	....	....	....	....	17	10	....	....
Goramari "	1	65	1	65	....	....	39	39	....	1	65	....	....
Singri Hill "	....	29	....	29	....	....	5	5	....	....	29	....	
Total	55	36	55	36	....	....	641	641	....	55	36	....	....
SIBSAGAR DIVISION													
Mikir Hill Reserve	35	....	35	....	....	....	25	25	....	35	....	....	....
Holongapar "	11	60	11	60	....	....	25	25	....	11	60	....	....
Derai "	17	40	17	40	....	....	43	42	1	9	20	8	20
Abhaypur "	18	20	13	40	4	60	34	34	....	6	40	11	60
Upper Daigurung "	6	....	6	....	....	....	7	7	....	6	....	....	....
Lower " "	4	40	4	40	....	....	9	9	....	4	40	....	....
Sola "	8	40	8	40	....	....	66	66	....	8	40	....	....
Total	101	40	96	60	4	60	209	208	1	81	40	20	...

Names of divisions and forests	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1884-85		Length of artificial boundaries and demarcated natural boundaries not cleared in 1884-85.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1884-85.	Total number of boundary-marks not repaired in 1884-85.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer		Total length of artificial boundaries and demarcated natural boundaries not inspected by the Divisional Officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
LAKHIMPUR DIVISION													
Paiapara Forest	8	....	8	...	..	...	77	77	....	8	....	....	....
Upper Dehing "	50	....	42	....	8	....	432	432	....	26	....	24	...
Dehingmukh "	2	40	2	40	....	....	1	.	1	2	40	....	...
Jokai "	11	....	11	....	...	....	182	182	....	10	50	....	30
Jaipur "	16	55	11	21	5	34	269	15	254	9	41	7	14
Kuddum "	3	30	3	30	...	....	46	46	....	8	30	..	...
Bhorolwa "	1	30	1	30	....	....	16	16	....	1	30	....	....
Railway concession	41	....	32	....	9	....	53	2	51	22	...	19	....
Total	133	75	111	41	22	34	1,076	770	306	88	31	50	44
CACHAR DIVISION													
Upper Jiri reserve	8	30	8	30	....	....	72	72	....	3	31	4	79
Lower " "	3	32	3	32	....	....	36	36	....	3	32	....	..
Barak "	15	13	15	13	....	....	161	161	....	12	17	2	76
Sonai "	10	59	10	59	....	....	75	75	....	....	....	10	59
Katakhal "	19	6	19	6	....	....	221	221	....	13	4	6	2
Dhaleswari "	10	46	10	46	....	....	66	66	....	5	4	5	42
Inner Line "	1	10	1	10	....	....	10	10	....	....	...	1	10
Mupa Mahur Protected forest	....	73	....	40	....	33	....	....	....	....	....	....	73
Langting Mupa " "	1	....	1	....	....	....	....	....	....	....	....	1	....
Total	70	29	69	76	....	33	641	641	....	37	8	33	21
SYLHET DIVISION.													
Langai and Singla Protected Forest	6	...	....	....	6	....	25	....	25	....	....	6	....

Appendix III.

KULSI PLANTATION MEMORANDUM.

Measurement of trees of the different species, details of expenditure incurred, and table showing the rainfall in 1884-85.

RUBBER PLANTATIONS.

EASTERN BLOCK, 1873 TO 1877.

Area 88 acres.

In this plantation 100 trees were actually measured, but the average has been computed from 40 of the largest trees:—

Number of dominant trees measured.	Average height.	Average girth.
40	27′ 9″	2′ 4″

Amongst the largest and finest trees are the following:—

No.	Height. Feet.	Girth. Feet.	Inches.
1	31	2	11
2	32	3	9
3	28	3	2
4	31	2	2
5	33	3	4
6	31	3	8
7	33	3	2
8	26	3	2
9	27	2	9
10	35	4	6

WESTERN BLOCK, 1878.

Area 13 acres.

In this plantation also 100 trees were measured, and the calculations are deduced from 40 of the largest trees:—

Number of dominant trees measured.	Average height.	Average girth.
40	34′ 4″	2′ 9″

Among the largest are the following:—

No.	Height. Feet.	Girth. Feet.	Inches.
1	41	2	2
2	41	2	5
3	42	3	1
4	38	3	7
5	37	3	1
6	37	2	1
7	37	2	2
8	37	3	0
9	37	2	9
10	36	2	6

WESTERN BLOCK, 1883 AND 1884.

Area, 47·55 acres.

Here again 100 trees were actually measured, but of these 50 were selected, and the averages have been deduced from their measurements.

Number of dominant trees measured.	Average height.	Average girth.
50	14′	7″

The best of these are the following:—

No.	Height. Feet	Girth. Feet.	Inches.
1	19	1	0
2	18	1	1
3	20	0	9
4	15	0	9
5	15	0	8
6	16	0	7
7	17	0	7
8	15	0	8
9	15	0	9
10	14	0	7

The following was the expenditure in each block separately:—

EASTERN BLOCK, 1873 TO 1877

	Rs.	A.	P.
Clearing jungle	123	3	3
Repairing fence	127	9	0
Cutting creepers	144	15	6
Ditto line	0	4	6
Transplanting Poma	27	6	6
Ditto Bamboo	7	9	6
Ditto Rubber	10	14	0
Sowing Nahor-seed	2	11	0
Total ...	444	9	3

WESTERN BLOCK, 1878.

	Rs.	A.	P.
Clearing jungle	17	10	0
Cutting creepers	11	5	3
Transplanting Bamboos	5	6	3
Earthing up Rubber-plants	2	0	0
Total ...	36	5	6

WESTERN BLOCK, 1883 AND 1884.

	Rs.	A.	P.
Establishments	18	0	0
Clearing jungle	74	6	9
Purchase of Rubber-seed	2	0	0
Sowing	29	14	0
Transplanting	152	12	6
Tying plants on stakes	48	5	6
Cutting creepers	11	12	9
Watching at night...	25	9	3
Total ...	362	12	9

The trees in each plantation were counted.
The result of the enumeration was as follows:—

Name of Block.		Trees alive.	Vacancies.	Total.
Eastern Block, 1873 to 1877, area 88 acres	...	2,382	46	2,428
Western „ 1878, area 13 acres	...	424	8	432
Ditto „ 1883 and 1884, area 47 acres	...	2,114	211	2,325

TEAK PLANTATIONS.

COMPARTMENT, 1872.

Area 8·75 acres.

The measurement of trees in this plantation gave the following results:—

Number of dominant trees measured	Average height of trees.	Average height of bole.	Average girth.
50	60′	33′	2′ 5″

The following are amongst the best trees measured in this plantation :—

No.	Height. Feet.	Girth. Feet.	Inches.
1	70	2	8
2	70	3	1
3	67	3	7
4	63	2	7
5	66	2	11
6	68	3	4
7	67	3	7
8	65	2	9
9	66	2	9
10	60	2	11

The girth is in each case measured at four feet above ground. The average height of the tree has been deduced from the 50 trees measured, but for the bole only 25 were measured.

COMPARTMENT, 1873.

Area 33 acres.

The following results were obtained from the measurement of trees in this plantation:—

Number of dominant trees measured.	Average height of trees.	Average height of bole.	Average girth.
50	57′	25′ 6″	1′ 11″

Amongst the largest trees in this plantation are the following:—

No.	Height. Feet.	Girth Feet.	Inches.
1	65	2	7
2	67	2	8
3	62	2	2
4	59	2	3
5	60	2	2
6	54	2	6
7	65	2	3
8	60	2	3
9	55	2	5
10	59	2	2

The expenditure in these two compartments has been Rs 11-8.

The number of dominant trees counted on two average acres of land in compartment 1873 was 600 and 748 respectively.

COMPARTMENT, 1874.

Area 17 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	63′	2′ 3″

The following are the best amongst the trees measured:—

No.	Height. Feet.	Girth. Feet.	Inches.
1	67	2	7
2	70	2	9
3	68	2	7
4	70	2	8
5	66	2	8
6	68	2	7
7	68	2	7
8	63	3	0
9	80	2	9
10	70	2	10

No expenditure was incurred on this compartment.

COMPARTMENT, 1875.

Area 60 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	41′	1′ 6″

The growth of the trees in this plantation is very irregular. Some fair-sized Teak-trees have died during the year. The Sam-seedlings planted out this year to supply vacancies here are looking healthy.

Amongst the best trees measured were as follows:—

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	51	2	1
2	50	2	4
3	50	2	4
4	53	2	6
5	52	1	10
6	48	1	10
7	50	1	11
8	48	1	10
9	54	2	1
10	59	2	4

The expenditure on this compartment has been Rs. 244.

COMPARTMENT, 1878.

Area 20 acres.

Number of dominant trees measured.	Average height.	Average girth.
60	41′	1′ 5″

Amongst the best trees measured are as follows :—

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	44	1	9
2	45	1	10
3	44	1	7
4	46	2	4
5	47	1	7
6	45	1	11
7	46	2	4
8	47	1	7
9	45	1	11
10	44	1	9
11	43	1	10
12	47	1	7

The expenditure incurred on this compartment has been Rs. 101.

COMPARTMENT, 1879.

Area 10 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	29′	10″

Amongst the largest of these trees are the following :—

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	32	0	11
2	34	0	11
3	33	0	11
4	30	0	11
5	31	1	0
6	29	1	0
7	30	0	11
8	36	1	0
9	35	0	11
10	32	0	11

The Poma trees in this plantation were also measured, and gave results as under :—

Number of dominant trees measured.	Average height.	Average girth.
50	30′	1′

The following are the largest :—

No.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	32	1	3
2	30	1	3
3	38	1	3
4	36	1	2
5	37	1	2
6	39	1	3
7	35	1	6
8	39	1	3
9	32	1	2
10	35	1	2

The expenditure on this compartment has been Rs. 25.

COMPARTMENT, 1881.

Area 20 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	27′	10″

The following are amongst the best trees in the compartment:—

No.	Height. Feet.	Girth. Feet.	Inches.
1	33	1	0
2	34	1	2
3	28	1	0
4	31	1	1
5	32	1	0
6	33	0	11
7	31	1	0
8	31	1	0
9	32	1	0
10	28	1	0

The following trees are also to be found in this compartment:—

298 *Pithecolobium Saman*, of an average height of 18 feet. They are for the most part crooked, forked, and illgrown.

224 Sissu-trees of an average height of 15 feet. These look healthy.

81 Koir trees of an average height of 8 feet.

The expenditure on this compartment has been Rs. 37.

SISSU PLANTATION, 1873.

Area 20 acres.

This plantation is mixed, consisting of Sissu, Ajhar, and Poma; but measurements of Sissu and Poma only have been made, the Ajhar being for the most part small.

100 trees of each kind were actually measured, but the calculations were deduced from 50 of the largest.

Sissu.

Number of dominant trees measured.	Average height.	Average girth.
50	34′	1′ 6″

The following are the largest amongst these:—

Number.	Height. Feet.	Girth. Feet.	Inches.
1	34	1	8
2	38	2	2
3	37	1	10
4	34	1	9
5	37	1	10
6	34	1	9
7	38	1	10
8	38	1	10
9	25	1	11
10	34	1	8

Poma.

Number of dominant trees measured.	Average height.	Average girth.
50	37′	2′

The 10 largest Poma trees are :—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	30	2	5
2	33	2	6
3	43	2	11
4	40	2	7
5	47	2	9
6	49	2	5
7	48	2	7
8	40	2	5
9	50	2	4
10	36	2	8

This plantation was extended in 1883 by sowing Ajhar-seed in lines, of which there are 91 of an average length of 267 feet by 4 feet wide.

The lines are on the whole fairly stocked with plants, but a great number have died.

The expenditure on this plantation has been Rs. 148.

The total expenditure on plantation work at the Kulsi during 1884-85 was the following :—

		Rs	A	P
1	Rubber—			
	Eastern block, 1873 to 1877, 88 acres	444	9	3
	Western „ 1878 to 1884, 60 55 acres	380	2	3
2.	Teak—			
	Compartments, 1872 to 1875, 1878, 1879, and 1881, 168·75 acres	424	7	0
3	Sissu, 20 acres	148	3	6
4	Bamboo, 2 acres	13	10	6
5	Experiments in growing exotic trees	159	7	3
6	Nurseries	201	6	3
7	Miscellaneous... Collection and despatch of seed	72	7	9
	Purchase of rain hats	10	8	0
	„ of gunpowder	19	0	0
	Other materials	122	0	0
8.	Establishment	238	0	0
	Grand Total as per summary	2,233	13	9

Annual rainfall at the Kulsi plantation :—

Months.	1883-84.	1884-85.
April	6·64	5·77
May	17·22	8·64
June	17·59	10 51
July	17·55	17·96
August	7·37	18·93
September	7·95	9·12
October	0 27	4·85
November	.....	0·10
December	0·68	.....
January	0·15	0·45
February	0·64	0·23
March	2·88	2·48
Total	78·94	79·04

J. T. JELLICOE,

Deputy-Conservator of Forests, Kámrúp Division.

Appendix IV.

CHARDUÁR CAOUTCHOUC PLANTATION MEMORANDUM.

MEASUREMENT OF TREES, DETAILS OF EXPENDITURE INCURRED, AND TABLE SHOWING THE RAINFALL IN 1884-85.

MEASUREMENT AND COUNTING OF TREES.

Compartment.	Between 5 and 10 feet.	Between 10 and 15 feet.	Between 15 and 20 feet.	Between 20 and 25 feet.	Between 25 and 30 feet.	Between 30 and 35 feet.	Between 35 and 40 feet.	Between 40 and 45 feet.	Between 45 and 50 feet.	Over 50 feet.	Vacancies.	Total.
1	.....	241	476	362	149	25	14	1	...	...	...	1,268
2	.....	197	412	344	169	88	41	17	3	...	...	1,271
3	.....	221	210	141	113	101	40	19	10	...	...	855
4	.....	458	678	465	209	97	49	12	6	1	...	1,975
5	.....	12	828	812	212	39	14	3	...	...	...	1,920
6	.....	207	372	376	116	25	5	...	...	...	...	1,101
7	.....	327	325	198	49	13	1	...	...	...	..	913
8	.....	260	450	185	74	19	...	...	...	...	...	988
9	.....	325	616	73	.....	.....	...	...	...	...	...	1,014
10	.....	245	435	228	.....	.....	...	...	...	...	...	908
11	.....	935	679	4	.....	.....	...	...	...	...	...	1,618
Total April 1885 ...	.....	3,428	5,481	3,188	1,091	407	164	52	19	1	...	13,831
" " 1884 ...	359	6,383	5,137	1,427	467	139	48	20	1	...	30	14,011
" June 1883 ...	1,864	6,565	2,543	939	279	123	64	21	3	...	110	12,511

Heights and girths of 50 trees measured in each year's plantation since 1874-75.

Year when planted	Year when measured.					
	1884-85.		1883-84.		1882-83.	
	Average height in feet.	Average girth in feet.	Average height in feet.	Average girth in feet.	Average height in feet.	Average girth in feet.
1874-75	43′ 4″	5′ 5″	40·06	3·55	37·66	2 66
1875-76	40′ 1″	4′ 7″	36 36	2·84	34·41	2·08
1876-77	38′ 2″	4′ 9″	34·17	2·38	32·25	2·08
1877-78	34′ 9″	3′ 9″	30 27	2 19	29 41	1 75
*1878-79	30′ 2″	2′ 5″	25·41	1·55	23·31	1·08
1879-80	23′ 11″	2′ 5″	19 85	1·20	17 41	0·81
1880-81*	20′ 1″	1′ 10″	15 69	0·98	13 66	0·66

Condition of Nurseries at the end of 1884-85.

Number of compartments	Area. Acres.	Number of seedlings.	Height		
			Greatest	Average.	Least
Old nursery in compartment No. 2	5 34	30,403	25′ 0″	11′ 0″	1′ 0″
New ditto ditto " 2	0·42	5,023	11′ 7″	42′ 11″	0′ 7″
Old ditto ditto " 3	4·08	36,278	25′ 1″	12′ 0″	1′ 0″
New ditto ditto " 3	0·39	4,678	10′ 1″	5′ 3″	0′ 5″
Nursery in compartment " 9	4 13	32,200	22′ 7″	13′ 0″	1′ 0″
Ditto ditto " 10	9 36	64,621	18′ 3″	10′ 0″	0′ 9″
Total	23 72	173,203	.....	.....	.....

Details of expenditure in the Chardúar Caoutchouc Plantation during 1884-85 as compared with the two previous years.

Particulars.	Amount.		
	1882-83.	1883-84	1884-85.
	Rs. As. P	Rs As. P.	Rs. As P
Establishment (including plantation fence in 1882-83 and 1883-84.)...	2,363 3 6	680 5 3	658 5 7
Collection, carriage, sowing, and transplanting of seeds	130 12 0	122 10 0	311 4 0
Clearing of lines, removing of trees and stumps, repairing mounds, renewing stakes, and levelling paths	4,008 15 0	2,739 3 0	1,737 14 0
Nurseries, fencing, weeding, draining, &c.	905 14 0	649 6 0	373 15 0
Pruning of trees in lines	24 6 0	17 2 0	11 8 0
Planting out Rubber-trees	76 12 0	201 14 0	100 4 0
Miscellaneous	69 2 0	38 12 0	72 4 0
Cost of completing compartment 11	.....	326 12 0	.....
" opening out " 12	.....	109 2 0	71 10 0
" opening out " 13	.....	.....	473 13 0
" opening out " 14	.....	.....	519 6 0
" repairing plantation buildings	.....	5 0 0	... .
Commission on labour	17 13 0	.....	.....
Expenditure on plantation road	.....	.....	79 8 0
Weeding and clearing seedlings of timber trees	.....	.....	184 14 0
Cost of diverting the Mansiri river	.....	.....	127 10 0
Total	7,596 13 6	4,890 2 3	4,722 3 7

Rainfall at the Chardúar Plantation, as compared with the previous two years.

Months	Rainfall.		
	1882-83.	1883-84.	1884-85.
April 1884.....	5·35	3·73	2·67
May "	13·34	13·23	10·55
June "	15·10	12·61	12·76
July "	10·58	21·48	12·14
August "	20·05	18·96	19·07
September "	18·26	6·33	7·90
October "	14·03	0·92	3·30
November "	0·68	0·28	0·18
December "	0·88	1·24	0·37
January 1885	0·54	2·66	0·85
February "	0·47	1·38	0·50
March "	0·22	2·11	0·82
Total	99·50	84·93	71·11

T. J. CAMPBELL,

Assistant-Conservator of Forests, Darrang and Nowgong Division.

Appendix V.

Account of an experimental tapping of 56 Caoutchouc or Rubber-trees (Ficus elastica) in the Balipara Government reserved forest, Darrang District, Assam, in 1885.

This experiment has now reached its third year, and is continued on its original lines. No roots or branches are touched. The incisions are not less than two feet apart on the original 50 trees, and the tapping only commences at 4 feet from the surface of the ground.

Six additional trees, never previously tapped, were selected, and the above principles slightly deviated from, as the incisions were only one foot apart.

One of the original 50 trees had died, and those on which the old incisions were recut in successive years have not quite such a healthy appearance as those which had the incisions made in fresh places.

The tabular statement below gives the results in the abstract :—

Locality.	Varieties.	How collected.	Trees previously tapped — Number of new or old incisions	Trees previously tapped — Yield.	Trees never tapped before.* — Number of new or old incisions.	Trees never tapped before.* — Yield.	Total. — Number of new or old incisions	Total. — Yield.
The 50 original trees.								
				S. C.		S. C.		S. C.
Valleys	Shikabor	Liquid	.....	....	2 new incisions.	8 0	2 new incisions	8 0
Ditto	Ditto	Dry	1 old incision	2 12	1 old do. ..	2 0	2 old do. ..	4 12
Ditto	Ditto	"	6 new "	21 8	6 new do ..	17 0	12 new do. ..	38 8
Ditto	Bogibor	Liquid	1 ditto "	2 0	.....	....	1 ditto do. ..	2 0
Ditto	Ditto	Dry	1 old " .. .	1 8	.....	....	1 old do. ..	1 8
Ditto	Ditto	"	7 new "	24 0	3 new do. ..	3 2	10 new do. ..	27 2
Crests of hills	Shikabor	Liquid	.....	....	6 ditto " ..	12 8	6 ditto do. ..	12 8
Ditto	Ditto	Dry	1 old "	2 0	1 old " ..	2 0	2 old do. ..	4 0
Ditto	Ditto	"	3 new "	7 8	4 new " ..	7 0	7 new do ..	14 8
Ditto	Bogibor	"	2 ditto " .. .	3 8	3 ditto " ..	6 6	5 ditto do. ..	9 14
	Total	Old incisions	3	6 4	2	4 0	5 trees	10 4
		New "	19	58 8	24	54 0	43 "	112 8
		Total	22	64 12	26	58 0	48	122 12
The 6 new trees								
Valleys	Shikabor	Liquid	.....	....	4 new	94 9	4 new	94 9
Ditto	Ditto	Dry	.....	....		11 14		11 14
Ditto	Bogibor	Liquid	.....	....		40 2		40 2
Ditto	.....	Dry	.....	....	2 "	4 12	2 "	4 12
	Total	New incisions	.....	....	6 "	151 5	6	151 5
	Grand Total		22	64 12	32	209 5	54	274 1

* This heading has no reference to last year, but describes the condition of the trees when selected in the first instance.

Averages as compared with the two previous years.

1884-85.

3	trees	previously	tapped	gave	6	seers	4	chs.	of dry	Rubber	from	old	incisions.	Averaged	2	seers	$1\frac{1}{2}$ chs
18	"	"	"	"	56	"	8	"		"	"	new	"	"	3	"	$2\frac{2}{3}$ "
1	"	"	"	"	2	"	0	"	liquid	"	"		"	"	2	"	0 "
2	"	never tapped	before		4	"	0	"	dry	"	"	old	"	"	2	"	0 "
16	"	"	"	"	33	"	8	"	"	"	"	new	"	"	2	"	9 "
8	"	"	"	"	20	"	8	"	liquid	"	"	"	"	"	2	"	$1\frac{1}{2}$ "
0	"	"	"	"	0	"	0	"	"	"	"	old	"	"	0	"	0 "
48					122		12										
5	trees	from old incisions		gave	10	"	4	"	Average per tree				...	...	2	"	$0\frac{4}{5}$ "
43	"	" new	"	"	112	"	8	"	"	"			...	...	2	"	$9\frac{29}{43}$ "
6	new	trees never tapped	before		75	"	$10\frac{1}{2}$	"	"	"			...	...	12	"	$9\frac{3}{4}$ "

1883-84.

11	trees	averaged	0 seers	9	chs.
11	"	"	1 "	$3\frac{8}{11}$	
14	"	"	0 "	$8\frac{4}{7}$	"
9	"	"	1 "	$10\frac{4}{9}$	"
4	"	"	2 "	5	"
1	"	"	2 "	0	"
50					
26	"	"	0 "	$9\frac{14}{26}$	"
24	"	"	1 "	$8\frac{5}{8}$	"

1882-83.

22	trees	averaged	3 seers	$14\frac{8}{11}$	chs.
20	"	"	3 "	15	"
8	"	"	7 "	4	"
			(14 "	8	" in a liquid state)
50					

50 trees averaged 4 seers $12\frac{4}{25}$ chs.

After tapping, the Rubber from one of the original 50 trees was collected and stolen, and the fact of one tree having died accounts for the record of 48 trees only.

The bad results of 1883-84 are due to the lateness of the season when collected, as the excessive rain never permitted the liquid mass to coagulate.

The actual yield of liquid Rubber from the six additional trees was 3 maunds 31 seers 5 chittacks, which in the process of drying was reduced to one half or 75 seers $10\frac{1}{2}$ chittacks, and the loss shown above, *viz.*, 1 maund 16 seers $14\frac{1}{2}$ chittacks, must therefore be attributed to theft.

The Rubber auctioned off at Tezpur fetched Rs. 56 per maund, and, applying this rate to it and the quantity reserved, the value amounts to Rs. 198-1-7; the cost of collection was Rs. 60-10, so that there is a net profit of Rs. 137-7-7.

	Mds.	S.	C.
Sold by auction at Tezpur	3	11	4
Kept for London Exhibition	0	10	4
Lost by drying	1	35	$10\frac{1}{2}$
Stolen	1	16	$14\frac{1}{2}$
Total	6	34	1

Full details are given in the following tabular statement:—

FOREST DEPARTMENT, ASSAM.—DARRANG AND NOWGONG DIVISION.

Statement showing the Results of an experimental Tapping of 56 Rubber-trees in the Bálipára Reserve, Darrang District, in 1885.

No. of trees	Measurement of trees. Height of trees.	Girth, including aerial roots.	Diameter of crown.	Locality and nature of soil.	Kind of trees	Rubber extracted in balls or loaves.	Condition of trees	Date. Tapped	Collected.	Yield from each tree. M. S. C.	Remarks.
1	99′	28′	92′	Valley of Balijuli, sandy loam, with pebbles.	Shikabor..	Ball ...	Good, was never tapped, 2 main aërial roots.	23rd Feb. 1885.	12th Mar. 1885.	0 2 8	New incisions.
2	91′	27′	84′	Side of hill near Sonai river, sandy loam.	" ...	" ...	Very good ditto 2 ditto ...	21st " ...	13th " ...	0 3 0	" "
3	90′	35′	88′	Ditto ditto ...	" ...	" ...	Good ditto 4 ditto ...	" " ...	" " ...	0 1 0	" "
4	110′	36′	87′	Valley of Sonai river, low, sandy loam	" ...	" ...	Ditto ditto 4 ditto ...	" " ...	" " ...	0 2 8	" "
5	90′	48′	80′	Bank of Sonai river, low, sandy loam.	" ...	" ...	Ditto ditto 3 ditto ...	" " ...	" " ...	0 1 12	" "
6	97′	28′	89′	Valley of Jaonjajuli, ditto ...	Bogibor .	" ...	Ditto ditto 3 ditto ...	22nd " ...	12th " ...	0 0 14	" "
7	105′	28′	90′	Ditto ditto ...	" ...	" ...	Ditto ditto 2 ditto ...	" " ...	" " ...	0 0 8	" "
8	122′	138′	151′	Ditto ditto ...	" ...	" ...	Very good loaf rubber extracted by Mr. Martin years ago, 18 main aërial roots.	" " ...	" " ...	0 3 0	" "
9	100′	28′	68′	Valley of Satni nadi ditto ...	" ...	" ...	Very good, was never tapped, 3 main aërial roots.	" " ...	" " ...	.....	(Stolen) New incisions.
10	122′	83′	110′	South of Guinaja Hill ditto ...	Shikabor..	" ...	Ditto ditto 6 ditto ...	23rd " .	" " ...	0 6 0	New incisions.
11	122′	40′	102′	Valley of Balijuli ditto ...	Bogibor ..	" ...	Good, ditto 2 ditto ...	" " ...	" " ...	0 2 2	" "
12	91′	.....	.....	Foot of Guinaja Hill ditto ...	Shikabor..	" ...	Very good, loaf rubber extracted by Mr Martin years ago, a few marks remain, 4 main aërial roots.	27th " ...	6th " ...	0 4 0	" "
13	118′	27′	89′	Right bank of Koliajuli near Mansiri land, low, rich sandy loam.	" ...	Loaf ...	Very good, was never tapped, 2 main aërial roots	10th Mar. 1885	11th " ...	0 3 0	" "
14	99′	54′	85′	Left bank of Koliajuli, low, rich sandy loam.	Bogibor ..	Ball ...	Good, loaf rubber extracted by Mr. Martin years ago, very few marks left, 8 main aërial roots.	25th Feb. 1885	5th " ...	0 2 12	" "
15	100′	75′	134′	Ditto ditto ...	Shikabor..	" ...	Very good, ditto 2 ditto ...	" " ...	" " ...	0 5 0	" "
16	100′	44′	88′	Ditto ditto ...	" ...	" ...	Ditto ditto 2 ditto ...	26th " ...	11th " ...	0 3 0	" "
17	89′	68′	113′	Left of Chaojuli, slightly elevated, rich sandy loam.	" ...	" ...	Ditto ditto 3 ditto ...	" " ...	7th " ..	0 3 8	" "
18	112′	76′	114′	Left of Chaojuli, low, rich sandy loam.	Bogibor ..	" ...	Ditto ditto 6 ditto ...	" " ...	6th " ...	0 4 0	" "
19	80′	25′	63′	Ditto ditto ...	" ...	" ...	Good ditto 3 ditto ...	" " ...	" " ...	0 2 0	" "
20	120′	35′ 6″	124′ 6″	Valley of ditto, ditto ...	Shikabor..	" ...	Ditto ditto 4 ditto ...	" " ...	7th " ...	0 3 0	" "
21	98′	101′	105′ 3″	Left bank of Chaojuli, low, rich, sandy loam	Bogibor ..	" ...	Ditto ditto 6 ditto ...	" " ...	" " ...	0 2 12	" "

22	120′	69′6″	91′	Right bank of Koliajuli, ditto ...	„ ...	Loaf ...	Ditto ditto 11 ditto ...	5th Mar. 1885.	6th „ ...	0	2	0	„	„
23	120′	71′	115′	Ditto ditto ...	Shikabor..	Ball ...	Ditto, was never tapped, 15 main aërial roots.	1st „ ...	10th „ ...	0	2	4	„	„
24	97′	.....	.....	Right bank of Koliajuli, top of steep hill, sandy loam.	„ ...	„ ...	Ditto ditto 8 ditto ...	3rd „ ...	9th „ ...	0	1	0	„	,
25	100′	113′	118′	Right bank of Koliajuli, side of steep hill, sandy loam.	„ ...	Loaf ...	Ditto ditto 20 ditto ...	8th „ ...	„ „ ...	0	1	0	„	„
26	100′	20′	66′	Ditto, top of steep hill, sandy loam.	„ ...	„ ...	Ditto ditto 1 ditto ...	„ „ ...	„ „ ...	0	1	0	„	„
27	97′	25′	100′	Ditto side of steep hill, sandy loam.	„ ...	„ ...	Ditto ditto 3 ditto ...	„ „ ...	„ „ ...	0	2	0	„	„
28	81′	20′	56′	Top of a steep hill, sandy loam	Bogibor .	Ball ...	Ditto ditto 1 ditto ...	3rd „ ...	11th „ ...	0	2	4	„	„
29	124′	101′6″	79′6″	West of Chaojuli, top of hill, sandy „	Shikabor.	„ ...	Ditto, was tapped, a few marks left, 8 mains aërial roots.	28th Feb. 1885.	8th „ ...	0	2	0	„	„
30	126′	37′	82′	Ditto ditto ...	„ ...	„ ...	Ditto ditto 3 ditto ...	„ „ ...	„ „ ...	0	2	0	„	„
31	90′	58′	70′	Ditto ditto ...	Bogibor .	„ ...	Ditto ditto 4 ditto ...	2nd Mar. 1885.	9th „ ...	0	1	8	„	„
32	84′	27′6″	81′6″	Koliajuli Hills, top of hill, sandy loam.	Sikabor...	„ ...	Ditto, was never tapped, 4 ditto ...	„ „ ...	„ „ ...	0	2	0	Old incision.	
33	99′	42′	78′	Ditto foot of hill ditto ...	„ ...	„ ...	Ditto ditto 4 ditto ...	„ „ ...	„ „ ...	0	2	0	New incision.	
34	100′	38′	77′	Ditto ditto ...	„ ...	„ ...	Ditto ditto 3 ditto ...	„ „ ...	„ „ ...	0	2	0	Old incision.	
35	92′	29′	90′6″	West of Chaojuli, ditto ditto ..	„ ...	„ ...	Ditto, was tapped a few marks left, 4 ditto.	28th Feb. 1885.	8th „ ...	0	2	8	New incision.	
36	99′	60′	98′	Valley of Kermerjuli, slightly elevated, sandy loam.	„ ...	„ ...	Ditto, was never tapped, 4 ditto ...	27th „ ...	„ „ ...	0	2	0	„	„
37	100′	74′	80′	Ditto ditto ...	„ ...	„ ...	Ditto was tapped, a few marks left, 6 main aërial roots.	„ „ ...	„ „ ...	0	2	0	Old incision.	
38	98′	41′	67′6″	Valley of Koliajuli, sandy loam ...	„ ...	Loaf ...	Very good, was never tapped, 4 main aërial roots.	5th Mar. 1885.	6th „ ...	0	5	0	New incision.	
39	98′	33′	65′	Koliajuli Hills, top of hill, sandy loam.	Bogibor...	Ball ...	Good, was tapped, a few marks left, 3 main aërial roots	28th Feb. 1885.	8th „ ...	0	2	0	„	„
40	90′	92′	146′	Valley of Kermerjuli, sandy loam ...	„ ...	„ ...	Ditto ditto 6 ditto ...	27th „ ...	6th „ ...	0	1	8	Old incision.	
41	88′	41′	73′	Ditto ditto ...	„ ...	„ ...	Ditto was never tapped, 5 ditto ...	„ „ ...	„ „ ...	0	1	12	New incision.	
42	97′	74′6″	195′	Mouth of Chaojuli, sandy loam ...	„ ...	„ ...	Very good, was tapped, a few marks left, 12 aërial roots.	25th „ ...	5th „ ...	0	7	0	„	„
43	72′	84′6″	86′9″	Right bank of Koliajuli, sandy loam ..	Sikabor...	„ ...	Not in good condition, dit'o 9 ditto ...	„ „ ...	„ „ ...	0	2	12	Old incision.	
44	90′	26′	77′	Ditto top of hill ...	„ ...	„ ...	Was never cut 4 ditto...	.....	.....		.....		Dead.	
45	100′	31′	61′	Koliajuli Hill, top of hill, sandy loam.	„ ...	Loaf ...	Good ditto 5 ditto...	7th Mar. 1885.	8th „ ...	0	2	0	New incision.	
46	100′	107′	140′	Ditto ditto ...	„ ...	„ ...	Ditto ditto 12 ditto ...	„ „ ...	„ „ ...	0	2	8	„	„
47	100′	71′	97′	Ditto ditto ...	„ ...	„ ...	Very good ditto 2 ditto ...	6th „ ...	7th „ ...	0	4	0	„	„
48	99′	40′	60′	Ditto ditto ...	Bogibor...	Ball ...	Good ditto 9 ditto ...	1st „ ...	10th „ ...	0	2	0	„	„
49	129′	92′	124′	Koliajuli Hill, side of hill, sandy loam.	„ ...	„ ...	Very good was tapped, a few marks left, marks on roots very prominent, 10 main aërial roots.	„ „ ...	„ „ ...	0	2	8	„	„
50	120′	40′	103′	Right bank of Koliajuli, sandy loam ..	Sikabor...	„ ...	Ditto ...	„ „ ...	„ „ ...	0	4	0	„	„
							Total	.....	.....	3	2	12		

SIX ADDITIONAL TREES TAPPED IN THE BALIPARA RESERVE.

No. of trees.	Measurement of trees.			Locality and nature of soil.	Kind of trees.	Rubber extracted in balls or leaves.	Condition of trees.	Date.		Yield from each tree.		Remarks.
	Height of trees.	Girth, including aërial roots.	Diameter of crown.					Tapped.	Collected.	Liquid.	Dry.	
										M. S. C.	M. S. C.	
51	80′	88	136′	Between Koliajuli and Mansiri river, sandy loam	Shikabor	Loaf ...	Very good, was never tapped, 5 main aërial roots.	27th Mar. 1885.	28th Mar. 1885.	0 28 0	0 3 6	New incision.
52	101′	49′	168′	North-east of Koliajuli, near Aka path, sandy loam	Bogibor...	„ ...	Good ditto 4 ditto ...	2nd April „	3rd April „	0 11 0	0 1 12	„ „
53	116′	46′	148′	East of Koliajuli, sandy loam, with pebbles	„ ...	„ ...	Very good, ditto 13 ditto ...	28th Mar. „	29th Mar „	0 29 2	0 3 0	„ „
54	116′	66′	134′	Valley of Koliajuli, low, rich, sandy loam.	Shikabor..	„ ...	Ditto ditto 5 ditto ...	29th „ „	30th „ „	1 0 8	0 4 5	„ „
55	115′	50′	115′	Valley of Koliajuli, on the left bank of Harkatajuli, low, rich sandy loam	„ ...	„ ...	Good. ditto 5 ditto ...	30th „ „	31st „ „	0 20 6	0 2 9	„ „
56	109′	49′	92′	Right bank of Koliajuli, ditto ...	„ ...	„ ...	Ditto ditto 3 ditto ...	31st „ „	1st April „	0 5 11	0 1 10	„ „
							Total	.....	.....	3 14 11	0 16 10	

T. J. CAMPBELL,

Assistant-Conservator of Forests,

Darrang and Nowgong Division.

Appendix VI.

Statement showing the number of permits granted in 1884-85, as compared with those granted in the previous year.

Name of division.	Trade permits.		Elephant permits.		Gurkati permits.		Time permits.		Home permits.		Amount of fees.	
	1883-84.	1884-85.	1883-84.	1884-85.	1883-84.	1884-85.	1883-84.	1884-85.	1883-84.	1884-85.	1883-84.	1884-85.
											Rs.	Rs.
Gáro Hills—												
Foreign passes ...	.....	.....	.....	.....	2,210	2,073	.....	.....	.....	.....	5,282	4,666
Gáro „ ...	.....	.....	.....	.....	2,300	1,388						
Goálpára	80	50	.....	.....	.....	.....	.....	1	.....	193	42	34
Kámrúp	1,337	811	.....	.....	.....	.....	33	26	96	351	718	407
Darrang and Nowgong ...	375	360	.....	.....	.....	.....	6	7	254	1,377	209	210
Sibságar	330	178	.....	.....	.....	.....	213	241	1,267	499	436	370
Lakhimpur	239	289	.....	.....	.....	.....	200	488	26	169	671	632
Cachar	1,963	2,678	119	127	.....	.....	.....	.....	56	208	2,110	2,909
Sylhet ...	254	585	3	.....	.....	.....	.....	.....	1,256	252	885	711
Khási and Jaintia Hills		68	.....	.....	.....	.....	.....	.....		362		249
Total	4,578	5,019	122	127	4,510	3,461	452	763	2,955	3,411	10,353	10,188

Appendix VII

RULES REGARDING ROYALTY TO BE PAID ON TIMBER AND OTHER FOREST PRODUCE ON LEASED LANDS.

Revenue Department Circular No. 19, dated the 25th April 1884.

IN forwarding a copy of notification No. 11, dated the 25th April 1884, I am desired to point out that the reason for cancelling the notification dated the 31st December 1883 is that the Chief Commissioner does not desire to assert the rights of Government to forest produce, other than reserved trees, standing on lands which have already been settled on annual, decennial, or *nisf-khirâj* leases. Provided that no royalty will be charged on trees which were paid for when the lease was given, or which have grown since the lease was given, and that on *nisf-khirâj* lands royalty will be charged at half rates only.

2. In future, whenever an application is made for a lease of waste land, all forest produce on that land will be valued by a Forest Officer on the principles laid down in Circular No. 27, dated the 15th October 1878, and Circular No. 50, dated the 25th September 1879. These principles, with some modifications, are now restated.

3. Before a lease is given for any waste land (whether it be annual or decennial or a waste land grant for 30 years), reference must be made to the Forest Officer, who will value the forest produce on the land. This supersedes paragraph 10 of Circular No. 24, dated the 13th April 1876, under which the valuation on waste land grants was to be made by the Deputy-Commissioner. In framing his valuation, the Forest Officer will be guided by the following rules:—

(1) If there are but a few scattered trees, each tree should be valued separately. For trees of 4 feet and more in girth measured 4 feet from the ground, the full royalty as sanctioned by the Chief Commissioner for the time being must be charged: for trees of 2 feet and more, and less than 4 feet, in girth measured 4 feet from the ground, half-royalty only will be charged; and for trees of less than 2 feet in girth measured 4 feet from the ground, no charge at all will be made.

(2) If the trees are numerous, and the land is of the nature of forest land, the valuation should be made at an acreage rate according to the following classification:—

			Rs.		Rs.	
First-class forest	...	...	from 12	to	20	per acre.
Second „	...	...	„ 4	„	10	„
Third „	...	...	„ 1	„	3	„

due regard being had to the size and quality of the timber, its accessibility, and any other conditions affecting its value on the spot.

(3) Land upon which sâl-timber is growing must not be assigned in any case without a reference having first been made to the Conservator.

If the Deputy-Commissioner does not approve the valuation of the Forest Officer, reference shall be made to the Conservator of Forests.

4. The applicant must pay the value fixed on the forest produce before he receives the lease or enters on the land. Provided that—

(*a*) In case any time is likely to elapse before the Forest Officer can frame his valuation, the lease may be given at once on condition that the applicant declare his willingness to pay the value which may be set on the forest produce.

(*b*) If the applicant is a ryot taking the land on annual lease, the value of the forest produce need not be paid unless it is removed for sale.

5. Free grants of forest produce require the specific sanction of the Chief Commissioner in each case.

Revenue Department Notification No. 11, dated the 25th April 1884.

In supersession of Notification No. 50, dated the 31st December 1883, published at page 3 of the *Assam Gazette* of the 5th January 1884, which is hereby cancelled, the Chief Commissioner is pleased to prescribe the following rates of royalty to be paid in the Assam Valley districts on trees and other forest produce which are the property of Government, or were produced on Government land:—

		Rs.	A.
(1)	For every sâl-tree	10	0
(2)	„ „ other reserved tree...	6	0
(3)	„ „ unreserved tree	2	0
(4)	„ „ each pole or sapling	0	1
(5)	„ „ boat or dug-out, the royalty payable on the tree out of which it is cut.		
(6)	For 100 *jangali* or *kata* bamboos	1	0
(7)	„ „ *jati* bamboos	2	0
(8)	„ „ *bhaluka* bamboos	3	0
(9)	„ every 100 bundles of cane of 10 pieces each	0	12
(10)	For every maund of charcoal, or for every nine cubic feet, if manufactured in the forests	0	2
(11)	For every permit to remove firewood for one month	1	0
(12)	„ „ „ „ „ year	9	0

Appendix VIII.

ASSAM RIVER RULES.

REVENUE DEPARTMENT NOTIFCATION No. 9, DATED 13TH MARCH 1885.

In exercise of the powers conferred by Section 41, of Act VII. of 1878 (the Indian Forest Act, 1878), and in supersession of the Rules published in the Revenue Department Notification No. 20, dated the 10th August 1880, the Chief Commissioner of Assam is pleased to make, and, with the sanction of the Governor-General in Council, to publish, the following Rules, which shall come into force on and from the 1st April next:—

I. All timber and other forest produce which is brought down by the Brahmaputra river within the Province of Assam shall be stopped at such places as the Chief Commissioner may, from time to time, by notification in the *Assam Gazette*, prescribe for examination and for the payment of the amounts, if any, due to Government thereon, whether as duty, royalty, or on any other account; and the persons in charge of such timber or forest produce shall be bound to produce any passes which may have been granted to them for such timber or forest produce when called upon to do so by the officer authorised by the Chief Commissioner in this behalf at the place of stoppage.

II. If such timber or other forest produce is brought from private land, it shall not be removed from the place of stoppage without a pass. Provided that, when the persons in charge of the timber or forest produce produce a certificate of origin in the form appended to these Rules, and signed by the owner of the land whence the timber or forest produce has been derived, or by his agent duly authorised in that behalf, the certificate shall be a sufficient pass for the purposes of this rule.

III. Any person refusing or neglecting to stop such timber or other forest produce at the places notified from time to time by the Chief Commissioner under Rule I., for examination, or to produce a pass when called upon to do so in accordance with the foregoing Rules, or removing timber or forest produce in contravention of Rule II., shall be punished with imprisonment of either description, which may extend to one month, or with fine, which may extend to Rs. 100, or with both.

CERTIFICATE OF ORIGIN REQUIRED UNDER THE PROVISIONS OF THE ASSAM RIVER RULES FOR PRIVATE TIMBER OR OTHER FOREST PRODUCE.

1. Name, caste, and father's name of the owner of the land whence the forest produce covered by this certificate was derived.

2. Residence of the owner of the land whence the forest produce covered by this certificate was derived.

3. Name of village or estate where the timber or other forest produce was cut.

4. Description of the timber or other forest produce.

5. Amount of the timber or other forest produce.

6. Name, caste, father's name, and residence of person in charge of the timber or other forest produce.

7. Destination to which the timber or other forest produce is to be conveyed.

8. I, A. B., son of C. D., the person named in the first entry above (or his agent duly empowered to grant this certificate), do hereby declare that the timber (or other forest produce, as the case may be), specified in this certificate, was cut upon my (or my principal's) private land, and that no portion of the said timber (or other forest produce, as the case may be) is the property of Government, or was produced on Government land.

Appendix IX.

Statement showing increase nd decrease in forest produce removed by purchasers in 1884-85, as compared with that removed in the previous year.

Description of forest produce.	Gáro Hills Division.				Goálpara Division.				Kámrúp Division.				Darrang and Nowgong Division.				Sibsagar Division			
	1883-84.	1884-85.	Increase	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase	Decrease.	1883-84	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.
Reserved Forests.																				
Sál-trees	.....	.....	.....	.....	1,212	1,064	.....	148	2,769	1,580	.....	1,189	42	32	.....	10	.....	.....	.....	.....
Reserved trees	.....	.....	.....	.....	425	157	.....	268	332	139	.....	193	38	95	57	.....	65	69	4	.....
Unreserved trees	.....	.....	.....	.....	32	59	27	.....	24	51	27	.....	253	754	501	.....	64	604	540	.....
Total trees ..	.....	.....	.....	.....	1,669	1,280	.....	389	3,125	1,770	.....	1,355	333	881	548	.....	129	673	544	.....
First-class timber..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Second ditto	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Third ditto	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Converted timber	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,755	1,755	.....
Poles or saplings	.....	.....	.....	.....	879	525	.....	354	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Boats or dugouts	.....	.....	.....	.....	128	12	.....	116	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dead wood	.....	.....	.....	.....	1,064	991	.....	63	9,800	3,938	.....	3,862	40	16	.....	24	1	30	29	.....
Miscellaneous pieces	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trade permits	.....	.....	.....	.....	80	40	.....	40	....	811	811	.....	.....	20	20	.....	19	52	33	.....
Firewood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ditto (rafts)	.....	.....	.....	.....	.....	.....	.....	.....	61	.....	.....	61	.....	.....	.....	2	1	.....	.....	1
Ditto permits (annual)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	3	3	4	86	82	.....
Ditto ditto (monthly)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,592	.....	636	636	.....
Charcoal (maunds)	.....	.....	.....	.....	90	50	.....	40	20	.....	.....	20	1,592	.....	.....	550	.....	.....	.....	.....
Bamboos	.....	.....	.....	.....	6,544	.....	.....	6,544	152	356	204	.....	550	.....	.....	.....	1,900	9,500	7,600	.....
Canes (bundles)	.....	.....	.....	.....	64,633	26,019	.....	38,614	.....	.....	.....	.....	1,990	2,464	474	.....	.....	.....	.....	.....
Agar (baskets)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grass and reeds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Protected and District Forests.																				
Sál-trees	391	131	.....	260	100	.....	.....	100	1,245	742	.....	503	69	22	.....	47	.....	.....	.....	.....
Reserved trees	404	203	.....	201	88	4	.....	84	50	51	1	.....	421	657	236	.....	732	374	.....	358
Unreserved	194	135	.....	59	6	77	71	.....	39	78	49	.....	625	852	227	.....	300	534	234	.....
Miscellaneous trees	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total trees ..	989	469	.....	520	194	81	.....	113	1,324	871	.....	453	1,115	1,531	416	.....	1,032	908	.....	124
First-class timber.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Second ditto	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Third ditto	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Converted timber	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Poles or saplings	120	.....	.....	120	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	40	.....	173	1,234	1,061	.....
Boats or dugouts	1,375	911	.....	464	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	114	115	1	.....
Dead wood	2,852	1,541	.....	1,311	.....	8	8	.....	50	385	335	.....	18	119	101	.....	2	2	.....	.....
Miscellaneous pieces	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	99	99	.....	.....	.....	.....	.....
Trade permits	.....	.....	.....	.....	.....	10	10	.....	.....	.....	.....	.....	30	347	317	.....	311	126	.....	185
Garkati passes (foreign)	2,210	2,073	.....	137	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ditto ditto (Gáro)	2,200	1,288	.....	912	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fire-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	6
Ditto permits (annual)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....	.....	.....
Ditto ditto (monthly)..	.....	.....	.....	.....	.....	.....	.....	.....	33	26	.....	7	11	7	.....	4	202	195	.....	7
Charcoal (maunds)	.....	.....	.....	.....	.....	159	159	.....	456	234	.....	222	6,382	2,381	.....	3,971	2,370	837	.....	1,543
Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	800	.....	.....	800	983	1,985	1,062	.....	575	2,025	1,450	.....
Canes (bundles)	.....	.....	.....	.....	.....	400	400	.....	.....	.....	.....	.....	.....	22,786	22,786	.....	8,065	16,509	8,444	.....
Grass ditto	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
„ and reeds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Reeds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Agar (baskets)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leaves (dals)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Home permits	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

APPENDIX IX.—(*Continued.*)

Description of forest produce.	Lakhimpur Division.				Cachar Division.				Sylhet Division.				Khási and Jaintia Hills Division				Nága Hills Division.			
	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.
Reserved Forests.																				
Sal-trees	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Reserved trees	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unreserved trees	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total trees ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
First-class timber	.....	.....	.....	.....	7,268	22,060	14,792	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Second ditto	.....	.....	.....	.....	3,461	12,560	9,099	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Third ditto	.....	.....	.....	.....	161,920	151,260	.....	10,660	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Converted timber	.....	.....	.....	.....	.....	243	243	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total ..	.....	.....	.....	.....	172,649	186,123	13,474	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Poles or saplings	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boats or dugouts	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dead wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous pieces	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trade permits	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fire-wood	.....	.....	.....	.....	2,751	3,499	748	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ditto rafts	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ditto permits (annual)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ditto ditto (monthly)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charcoal (maunds)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos	.....	.....	.....	.....	377,300	426,275	48,975	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canes (bundles)	.....	.....	.....	.....	10,365	14,617	4,252	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Agar (baskets)	.....	.....	.....	.....	.....	13	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grass and reeds	.....	.....	.....	.....	.....	2,800	2,800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Protected and District Forests.																				
Sál-trees	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64	2	.....	62	2	3	1	.....
Reserved trees	536	482	.....	54	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	5	.....	.....	.....	.....	.....
Unreserved trees	900	1,407	507	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....	.....	12	.....	.....	.....	.....
Miscellaneous trees	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	.....	.....	25	.....	.....	.....	.....
Total trees ..	1,436	1,889	453	.....	.....	.....	.....	.....	.....	.....	.....	.....	101	7	.....	94	2	3	1	.....
First-class timber	.....	.....	.....	.....	14,784	12,080	.....	2,704	2,142	3,604	1,462	.....	.....	.....	.....	.....	.....	.....	.....	.....
Second ditto	.....	.....	.....	.....	2,352	5,997	4,645	.....	2,058	4,853	2,795	.....	.....	.....	.....	.....	.....	.....	.....	.....
Third ditto	.....	.....	.....	.....	26,768	43,680	16,912	.....	4,714	11,965	7,251	.....	.....	.....	.....	.....	.....	.....	.....	.....
Converted timber	.....	.....	.....	.....	93	767	674	.....	1,269	1,500	231	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total trees ..	.....	.....	.....	.....	43,997	63,524	19,527	.....	10,183	21,922	11,739	.....	.....	.....	.....	.....	.....	.....	.....	.....
Poles or saplings	.....	.....	.....	.....	.....	52	52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boats or dugouts	43	45	2	.....	.....	200	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dead wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12,810	4,791	.....	8,019	.....	.....	.....	.....
Miscellaneous pieces	.....	100	100	.....	.....	1,213	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trade permits	.....	289	289	.....	.....	90	90	.....	254	585	331	.....	.....	68	68	.....	.....	.....	.....	.....
Garkati passes (foreign)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ditto ditto (Garo)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Firewood	.....	.....	.....	.....	663	1,306	643	.....	.....	104	104	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ditto permits (annual)	44	.....	.....	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ditto ditto (monthly)	156	488	332	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charcoal (maunds)	1,031	4,010	2,979	.....	.....	10	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos	4,800	1,275	.....	3,525	130,300	107,487	.....	42,813	356,255	278,763	.....	77,492	.....	.....	.....	.....	.....	.....	.....	.....
Canes (bundles)	18,100	91,350	73,250	.....	3,923	3,967	44	.....	2,913	6,282	3,369	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grass (ditto)	.....	.....	.....	.....	.....	.....	.....	.....	50,150	95,437	45,287	.....	58	361	303	.....	.....	.....	.....	.....
„ and reeds	.....	.....	.....	.....	36,446	126,590	90,144	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Reeds	.....	.....	.....	.....	.....	.....	.....	.....	1,958	1,752	.....	206	.....	.....	.....	.....	.....	.....	.....	.....
Agar (baskets)	.....	.....	.....	.....	12	7	.....	5	.....	10	10	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leaves (dals)	.....	.....	.....	.....	.....	.....	.....	.....	4,000	19,000	15,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
Home permits	.....	.....	.....	.....	.....	.....	.....	.....	1,256	252	.....	1,004	.....	362	362	.....	.....	.....	.....	.....

Appen

Statement showing increase and decrease in Forest Revenue

Description of forest produce.	1 Direction				2 Gáro Hills Division.				3 Goálpára Division.				4 Kámrúp Division				Darrang and Divi	
	1883-84.	1884-85.	Increase	Decrease	1883-84.	1884-85.	Increase	Decrease.	1883-84.	1884-85.	Increase.	Decrease	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs	Rs.	Rs.	Rs.	Rs.	Rs.
I Timber and other produce removed from the forest by Government agency.	..	..	..	..	755	254	..	501	..	.	..	..	252	9	..	243	745	70
II. Timber and other produce removed from the forest by consumers or purchasers—																		
RESERVE FORESTS.																		
Sál-trees	..	..	..	..	..	..	..	.	27,725	11,292		16,433	29,745	21,616	..	8,129	420	320
Reserved trees	..	..	..	..	..	..	..	..	2,177	800	..	1,368	1,902	862	..	1,040	228	570
Unreserved trees	..	..	..	..	..	..	..	..	52	162	110	..	224	142	..	82	606	1,517
Total	..	..	..	..	..	..	..	..	29,954	12,263	110	17,801	31,871	22,620	..	9,251	1,254	2,407
First-class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Second ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Third ditto	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Converted timber (pieces)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..
Poles or saplings	..	..	..	..	..	..	..	.	715	33	..	682	..	..	..	..	..	..
Boats or dugouts	..	..	..	..	..	..	..	..	1,018	69	..	949	..	..	..	..	.	..
Dead wood	..	..	..	..	..	..	..	..	640	571	..	69	5,112	2,124	..	2,988	70	12
Firewood	..	..	..	..	..	..	..	..	..	..	.	.	30	.	..	30	.	..
Ditto licenses (monthly)	..	..	..	..	..	..	..	..	..		..	..	..	.	..	..	..	3
Ditto (annual)	..	..	..	..	..	..	..	..	..	9	9	..	..	.	..	..	18	..
Charcoal	..	..	..	..	..	..	..	..	12	6	.	6	3	..	..	3	199	.
Bamboos	..	..	..	..	..	..	..	.	131	..	..	131	2	6	4	.	6	..
Canes	..	..	..	..	..	..	..	.	485	195	..	290	..	..		.	14	18
Grass	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
Trade permit fees	..	..	..	..	..	..	..	..	40	20	..	20	..	368	368	..	.	10
Pass-fees	..	..	..	..	..	..	..	..	..	..	..	..	1,100	15	.	1,085	39	24
Miscellaneous minor produce	..	..	..	..	..	..	..	..	..	..	..	..	218	42	.	176	2	..
Rubber mahâls	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..
Agar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass and reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Permit and pass fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Reserve Forests	..	..	..	..	..	..	..	..	32,995	13,166	119	19,948	38,336	25,175	372	13,533	1,602	2,474
PROTECTED AND DISTRICT FORESTS.																		
Sál-trees	..	..	..	..	2,825	3,566	741	..	590	10	..	580	12,450	6,668	..	5,782	690	220
Reserved trees	..	..	..	..	2,620	1,849	..	771	442	189	..	253	258	328	70	..	2,262	3,794
Unreserved trees	..	..	..	..	448	501	53	..	10	200	190	..	110	214	104	..	1,269	1,689
Miscellaneous trees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..
Total	..	..	..	..	5,893	5,916	794	771	1,042	399	190	833	12,818	7,210	174	5,782	4,221	5,703
First-class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Second ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Third ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	.	..	..	..	..	..	..	..	...	..	..	.	..
Converted timber (pieces)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	61
Poles or saplings	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	3
Boats or dugouts	..	..	..	..	..	10	10	..	..	..	..	..	..	..	..	..	..	..
Ditto *ad valorem* duty of 10 per cent	..	..	..	..	535	371	..	164	..	..	..	..	..	..	..	..	..	..
Timber on land allotted for cultivation	..	..	..	..	..	..	..	..	..	..	..	..	716	56	..	660	3,545	7,169
Dead wood	..	..	..	..	2,995	1,458	..	1,537	..	2	2	..	20	239	219	..	19	50
Firewood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ditto licenses (monthly)	..	..	..	..	..	..	..	..	..	..	..	..	50	39	..	11	11	7
Ditto ditto (annual)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	18
Charcoal	..	..	..	..	..	..	..	..	..	20	20	..	57	29	..	28	794	298
Bamboos	..	..	..	..	..	..	..	..	..	..	..	..	11	..	..	11	13	38
Canes	..	..	..	..	..	..	..	..	..	3	3	..	..	..	..	..	4	171
Reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grazing dues	..	..	..	..	74	19	..	55	..	..	..	..	..	..	..	..	..	..
Garkati licenses	..	..	.	..	5,658	5,293	..	365	..	..	..	..	..	..	..	..	..	..
India-rubber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rubber *mahâls*	..	..	..	..	..	..	..	..	..	..	..	..	905	..	..	905	22,395	22,380
Trade permit-fees	..	..	..	..	..	..	..	..	..	5	5	..	..	..	..	..	15	174
Pass fees	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	54
Permit and pass fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lac *mahâls*	..	..	..	..	..	..	..	..	8	..	..	8	9	20	11	..	45	55
Miscellaneous minor produce	..	..	..	..	3	3	..	..	39	..	..	39	123	27	..	96	..	..
Agar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass *mahâl*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass and reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leaves	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Home consumption permits	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Protected and District Forests	..	..	..	..	15,158	13,070	804	2,892	1,089	429	220	880	14,709	7,620	404	7,493	31,080	36,181
Total revenue under II	..	..	..	..	15,158	13,070	804	2,892	34,084	13,595	339	20,828	53,045	32,795	776	21,026	32,682	38,655
III. Confiscated, drift, and waif wood	..	..	..	..	65	3	..	62	68	2	..	66	1,169	204	..	965	338	306
IV. Revenue on forests not managed by Government.	..	..	..	..	450	628	178	..	44	30	..	14	..	..	.	..	..	..
V. Miscellaneous	18	2	..	16	52	13	..	39	675	675	..	..	440	711	271	.	61	106
Grand Total	18	2	..	16	16,180	13,968	982	3,491	34,868	14,302	339	20,908	54,906	33,719	1,047	22,284	33,823	39,137

dix X.

collected in 1884-85, as compared with that collected in the previous year.

5		6				7				8				9				10				11			
Nowgong sion.		Sibságar Division.				Lakhimpur Division.				Cachar Division.				Sylhet Division				Khási and Jaintia Hills division.				Nága Hills Division.			
Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease	1883-84.	1884-85.	Increase.	Decrease.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs	Rs.	Rs	Rs	Rs.
..	675	23	..	..	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	100	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
342	..	414	414	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
911	..	178	1,266	1,088	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..
1,253	100	592	1,680	1,088	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	1,817	4,628	2,811	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	649	1,216	567	..	.	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	10,120	9,365	..	755	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	.	..	12,586	15,209	3,378	755	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	41	41	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	110	110	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	6	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	58	..	45	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..
..	..	..	..	.	.	..	..	..	..	86	109	23	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	77	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	18	..	9	9	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	199	79	80	1	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	6	..	..	..	..	..	..	..	..	943	1,066	123	..	..	..	..	..	..	.	..	..	..	..	..	..
4	..	15	74	59	..	.	..	..	..	648	914	266	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	180	.	..	180	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	3	26	23	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	2	..	100	100	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	400	700	300	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	19	19	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	6	6	.	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	.	..	..	..	..	..	..	..	2,412	2,412	.	..	..	..	..	..	..	..	..	..	..	..	..
1,270	398	869	2,207	1,518	180	..	..	..	..	14,663	20,476	6,568	755	..	..	..	..	..	..	..	..	..	..	..	..
..	470	..	.	.	..	..	..	..	..	..	..	..	..	..	..	..	..	640	20	..	620	..	.	..	..
1,532	..	4,683	2,244	..	2,439	3,952	2,871	..	181	..	..	..	..	..	..	..	..	.	30	30	..	12	18	6	..
420	..	520	868	348	.	1,819	2,861	1,042	..	..	..	..	..	..	..	..	..	24	..	..	24	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..	12	..	.	..	..
1,952	470	5,203	3,112	348	2,439	4,871	5,732	1,042	181	..	..	..	..	..	..	..	..	676	50	30	656	12	18	6	..
..	..	..	..	..	..	..	..	..	.	3,696	2,683	..	1,013	785	901	116	..	..	..	..	..	..	..	.	..
..	..	..	..	..	..	..	..	..	.	441	1,292	851	..	392	910	518	.	..	..	..	..	..	..	.	..
..	..	..	..	..	..	..	..	..	..	1,673	2,579	906	..	..	748	748	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	5,810	6,554	1,757	1,013	1,177	2,559	1,382	..	..	..	..	..	..	.	..	..
61	..	..	..	..	..	..	9	9	..	11	197	186	.	137	162	25	..	..	..	..	..	..	..	..	..
3	..	8	78	70	..	..	..	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	354	354	..	138	143	5	..	..	532	532	.	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..
3,624	..	917	3,432	2,515	..	2,924	367	..	2,557	4,732	4,751	19	..	2,757	2,964	207	..	..	..	..	..	..	..	..	..
21	..	6	.	..	1	..	..	..	..	..	..	..	.	..	..	..	..	948	218	..	730	..	..	..	..
..	..	332	..	..	332	..	..	..	..	21	41	20	.	..	3	3	..	..	..	..	..	..	..	..	..
..	4	..	159	159	..	156	488	332	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	36	36	..	396	..	..	396	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	496	166	104	..	62	130	503	373	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	15	26	11	..	83	27	..	56	376	299	..	77	592	697	..	195	..	..	..	..	..	..	..	..
167	..	60	122	62	..	36	854	818	..	245	248	3	..	183	393	210	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	.	61	55	..	6	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	.	125	238	113	..	4	25	21	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	166	166	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..
..	15	..	..	..	..	6,838	10,080	3,242	..	600	1,150	550	..	..	..	..	..	600	350	..	250	800	..	..	800
159	..	50	63	13	..	..	144	144	..	..	90	90	..	257	585	328	..	..	68	68	..	..	.	..	..
54	..	..	..	..	..	..	..	..	..	..	..	..	.	223	957	734	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	2,649	731	..	1,918	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	12	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	180	340	160	..	..	..	..	..
..	..	..	..	.	..	..	..	..	..	18	11	..	7	..	15	15	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	224	415	191	..	..	..	..	..	..	.	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	98	38	..	60	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	12	10	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	628	126	..	502	..	181	181	..	..	..	..	..
6,086	985	6,757	7,503	3,580	2,834	15,572	18,513	6,131	3,190	14,784	15,061	3,352	3,075	6,442	8,766	3,027	703	2,408	1,232	460	1,636	812	18	6	800
7,356	1,383	7,626	9,710	5,098	3,011	15,572	18,513	6,131	3,190	29,447	35,537	9,920	3,830	6,442	8,766	3,027	703	2,408	1,232	460	1,636	812	18	6	800
..	20	59	252	193	..	..	17	17	..	883	397	..	486	102	27	..	75	..	..	..	..	..	..	.	..
..	..	267	..	..	267	37	4	..	33	2,902	2,720	..	1,182	.	..	..	..	2,680	360	..	2,320	..	..	..	..
45	..	270	466	196	..	9	618	609	..	681	568	..	113	14	23	9	..	116	57	..	59	..	..	..	..
7,401	987	8,245	10,428	5,487	3,304	15,618	19,152	6,757	3,223	34,013	39,222	9,920	5,611	6,558	8,816	3,036	778	5,204	1,649	460	4,015	812	18	6	80

Appendix XI.

Forest produce exported from, and remaining in, the district of Cachar, at the close of the year 1884-85.

MATIJURI AND SIYALTEK.

Description of forest produce.	Quantity of forest produce which passed the Matijuri revenue station.			Quantity of forest produce which had passed Matijuri and was again checked at Siyaltek revenue station.			Amount of forest produce which remained in the district of Cachar at the close of the year.		
	From Government and foreign forests	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.
Logs	806	3,916	4,722	694	2,924	3,618	112	992	1,104
Agor ... Baskets.	7	18	25	.....	18	18	7	.....	7
Posts and planks	8	190	198	8	105	113	.....	85	85
Bamboos	98,775	50,875	149,650	82,275	25,780	108,055	16,500	25,095	41,595
Canes ... Bundles.	4,888	6,254	11,142	4,723	6,172	10,895	165	82	247
Sungrass and reeds ... C. ft.	9,240	8,400	17,640	9,240	8,400	17,640	.....	.....	.....
Charcoal ... Mds.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Firewood ... "	.....	2,490	2,490	.....	20	20	.....	2,470	2,470

Forest produce exported from, and remaining in, the district of Cachar at the close of the year 1884-85.

SILCHAR AND SIYALTEK.

Description of forest produce.	Quantity of forest produce which passed the Silchar forest revenue station.			Quantity of forest produce which had passed Silchar, and was again checked at Siyaltek forest revenue station			Amount of forest produce which remained in the district of Cachar at close of the year.		
	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total	From Government and foreign forests.	From private forests.	Total.
Logs	6,000	7,511	13,511	2,065	4,694	6,759	3,935	2,817	6,752
Agor ... Baskets	13	.....	13	13	.....	13	.....	.....	.....
Posts and planks	18	509	527	.....	13	13	18	496	514
Bamboos	635,800	132,745	768,545	361,215	52,000	413,215	274,585	80,745	355,330
Canes ... Bundles	14,254	657	14,911	12,352	305	12,657	1,902	352	2,254
Sungrass and reeds ... C. ft.	2,900	891,365	894,265	2,800	721,365	724,165	100	170,000	170,100
Charcoal ... Mds.	10	1,089	1,099	.....	.....	.....	10	1,089	1,099
Firewood ... "	4,410	13,430	17,840	.....	17	17	4,410	13,413	17,823

Statement showing the forest produce removed from Government, foreign, and private forests in the Cachar Division in the year 1884-85.

Revenue station	Locality.	Logs.			Agar.		Posts and planks.			Bamboos.		Canes.		Sungrass and reeds		Charcoal.		Firewood.	
		Number.	Cubic feet.	Amount.	Number.	Amount	Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Amount.	Cubic feet.	Amount.	Number of maunds.	Amount.	Number of maunds.	Amount.
				Rs. As.		Rs. As.			Rs. As. P.		Rs. As.		Rs. As. P.		Rs. As. P.		Rs. As.		Rs. As. P.
Siyaltek	Government .. Reserve forests	31	1,628	262 2	..	....	....	..	....	....	....	....	....	.....	...	....	.....	....	.....
	Government .. District "	713	17,742	1,976 2	..	...	322	766	91 12 3	75,450	221 10	162	11 10 0	116,750	31 3 0	....	....	366	12 7 0
	Total	744	19,370	2,238 4	..	....	322	766	91 12 3	75,450	221 10	162	11 10 0	116,750	31 3 0	....	.....	366	12 7 0
	Foreign	.	...	.....	..	....	....	..	.	300	1 12	..	....	.... .	. ..	....	. . ..	..	.....
	Private	743	17,648	.....	..	....	92	148	....	115,975	.....	195	....	357,861	....	....	.....	28	.....
	Total Siyaltek	1,487	37,018	2,238 4	..	....	414	914	91 12 3	191,725	223 6	357	11 10 0	474,611	31 3 0		. . .	394	12 7 0
Silchar	Government Reserve forests	4,040	144,813	11,692 9	13	21 8	18	158	38 4 0	375,325	1,020 5	9,741	668 5 6	2,800	6 2 0		. . ..	3,499	123 5 9
	Government District "	1,063	39,563	4,378 13	.	.	....		....	28,050	85 2	3,805	252 13 0	100	0 1 0	10	2 5	886	30 11 0
	Total	5,103	184,376	16,071 6	13	21 8	18	158	38 4 0	403,375	1,105 7	13,546	921 2 6	2,900	6 3 0	10	2 5	4,385	154 0 9
	Foreign	897	25,922	1,849 13	..	....	....	..	....	232,425	639 1	708	47 4 0	.	....		... ..	25	1 12 6
	Private	7,511	147,466	.....	..	....	509	1,422	....	132,745	.....	657	....	891,365	. ..	1,089	.....	13,430	. .....
	Total Silchar	13,511	357,764	17,921 3	13	21 8	527	1,580	38 4 0	768,545	1,744 8	14,911	968 6 6	894,265	6 3 0	1,099	2 5	17,840	155 13 3
Matijuri	Government Reserve forests	767	28,807	3,427 1	..	..	8	67	6 3 9	50,950	152 6	4,876	318 12 0	..... .	....	..	.....	....	.....
	Government District "	39	1,584	290 1	7	10 8	....		..	....	... .	....	....	9,240	6 0 3		... ..	....	.....
	Total	806	30,391	3,717 2	7	10 8	8	67	6 3 9	50,950	152 6	4,876	318 12 0	9,240	6 0 3	....	. ....	..	.....
	Foreign	.	.	..... .		...	.. .	..	. ..	47,825	179 9	12	1 4 0	.. ..	. ..	....	... ..	. .	.....
	Private	3,916	103,377	.....	18		190	205	....	50,875	. . .	6,2544	. ..	8,400	....	....	....	2,490	.....
	Total Matijuri	4,722	133,768	3,717 2	25	10 8	198	272	6 3 9	1,49,650	331 15	11,142	320 0 0	17,640	6 0 3	..	.....	2,490	.....

Statement showing the increase and decrease in forest produce removed from the Government, foreign, and private forests in the Cachar Division during 1884-85, *as compared with* 1883-84.

Description of forest produce.	Government forests.				Foreign forests.				Private forests.			
	1883-84	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.
Logs	6,273	6,653	380	.....	1,116	897	.....	219	19,965	12,170	.....	7,795
Agar ..... Baskets	12	20	8	.....	.....	.....	.....	.....	77	18	.....	59
Posts' and planks	33	348	315	.....	.....	.....	.....	.....	741	791	50	.....
Bamboos	527,600	529,775	2,175	.....	303,626	280,550	.....	23,076	216,218	299,595	83,377	.....
Canes ..... Bundles	14,288	18,584	4,296	.....	1,320	720	.....	600	13,242	7,106	.....	6,136
Sungrass and reeds (C. ft.)	36,446	128,890	92,444	.....	100	.....	.....	100	1,638,303	1,257,626	.....	380,677
Charcoal ..... Mds.	.....	10	10	.....	.....	.....	.....	.....	1,153	1,089	.....	64
Firewood ..... "	3,414	4,751	1,337	.....	114	25	.....	89	5,824	15,948	10,124	.....

Statement showing the forest produced exporte viâ Diyangmukh outpost and registered at that station during each month in the year 1884-85.

Months.	Dugouts.		Posts.		Oars.		Planks.	
	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.
		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.
April 1884	3	85 0 0	64	25 0 0	.....	.....	26	17 0 0
May "	48	637 0 0	36	54 0 0	.....	.....	60	7 8 0
June "	35	501 0 0	206	115 8 0	.....	.....	.....	.....
July "	11	388 0 0	20	12 8 0	.....	.....	.....	.....
August "	10	178 0 0	30	24 4 0	24	6 0 0	50	12 8 0
September "	4	106 0 0	16	18 8 0	.....	.....	.....	.....
October "	7	68 0 0	29	14 8 0	27	27 0 0	.....	.....
November "	6	86 2 0	163	75 0 0	158	108 14 0	32	5 8 0
December "	5	27 12 0	93	38 3 0	4	3 0 0	.....	.....
January 1885	.....	.....	.....	.....	.....	.....	.....	.....
February "	12	124 4 0	.....	.....	13	7 0 0	.....	.....
March "	2	8 12 0	3	0 12 0	.....	.....	1	0 4 0
Total	143	2,209 14 0	660	378 3 0	226	151 14 0	169	42 12 0

SILCHAR:

The 11*th July* 1885.

H. G. YOUNG,

Assistant-Conservator of Forests, Cachar Division.

FOREST DEPARTMENT, ASSAM, SYLHET DIVISION.

Forest produce passed at the Langai and Singla revenue stations during each month in 1884-85.

Months.	Langai.								Singla					
	Logs.	Posts and planks.	Bamboos.	Canes in bundles	Grass and reeds	Charcoal in maunds	Firewood in maunds.	Amount realised	Logs.	Agar.	Bamboos.	Canes in bundles	Grass and reeds.	Amount realised
								Rs A. P						Rs A. P.
April 1884	43	.....	2,400	88	828	.....	.....	177 11 9	1	...	...	.....	.....	1 0 0
May "	32	30	6,900	294	1,185	.....	104	152 4 0	...	...	...	.....	586	18 5 0
June "	97	.....	43,375	122	.....	.....	.....	390 5 6	4	...	...	.....	.....	30 5 0
July "	105	....	25,850	102	101	.....	.....	325 5 0	2	...	2,100	270	140	51 12 0
August "	92	72	39,838	807	8,432	.....	.....	494 13 3	...	...	...	.....	.....	.....
September "	101	11	68,225	377	6,850	.....	.....	701 2 6	19	6	200	110	.....	36 15 0
October "	242	.....	20,250	1,351	12,360	.....	.....	964 13 3	...	...	250	180	.....	11 14 0
November "	41	.....	14,350	1,072	12,562	.....	.....	246 15 6	16	4	...	.....	....	49 4 0
December "	11	1	6,800	485	15,228	1	1	104 11 3	18	...	...	.....	.....	38 11 0
January 1885	...	.....	2,100	85	3,417	.....	.....	21 15 0	4	...	...	.....	50	10 8 0
February "	2	.....	5,725	260	41,450	.....	.....	146 14 0	...	...	...	.....	3 800	9 8 0
March "	19	.....	40,700	681	3,427	.....	.....	169 4 0	...	...	...	.....	2,550	6 6 0
Total ...	785	114	276,513	5,724	105,840	1	105	3,896 3 0	64	10	2,550	560	7,126	264 8 0

FOREST DEPARTMENT, ASSAM, SYLHET DIVISION.

Forest produce removed from Government and private forests passed at the Langai and Singla revenue stations during 1884 85.

Revenue station.	Locality	Logs.			Agar			Posts and planks.			Tea boxes.		Bamboos		Canes.		Reeds and grass.		Charcoal			
		Number	Cubic feet	Amount	Number	Cubic feet	Amount	Number	Cubic feet	Amount	Number.	Amount	Number	Amount	Number	Amount	Cubic feet	Amount	Maunds.	Amount.	Maunds	Amount
				Rs. A P			Rs. A. P			Rs A. P				Rs A P		Rs A P		Rs. A. P		Rs. A		Rs A.
Langai	Government	785	19 003	2,408 12 3	.		.. .	114	1,524	170 4 0	.	.. ..	276,813	693 8 6	5,724	358 4 9	105,840	261 6 6	1	0 8	105	3 9
	Private	49	1 054				.....	55	.....	.... ..	100	...	106 450	. .	980	.	199	. .		...	..	..
Singla	Government	64	1.528	169 1 0	10		15 0 0	.	....	. .. .		.	2,550	6 6 0	580	35 0 0	7,126	39 1 0	.	...	.	....
	Private			..		.	.....			. ...			5,500	... .	175	...	10 950	.	.	..		
	Total .	898	21,585	2,577 18 3	10		15 0 0	169	1,524	1.0 4 0	100	.	391,913	699 14 6	7,439	393 4 9	124,115	300 7 6	1	0 8	105	3 9

TARA KISOR GUPTA,
Sub-Assistant-Conservator of Forests, Sylhet Division.

Appendix XII.

Statement showing Forest Revenue realised by the Forest Department and Revenue Department in Assam.

1	2		3		4		5		6		7		8		9		10		11		12		13	
Division	Royalty on forest produce		Garkáti		Revenue from forests not managed by Government.		Miscellaneous		Revenue realised by mauzadars.		Total revenue realised by the Forest Department.		Revenue realised by tahsildars		Value of timber on lands taken up for cultivation		Rubber.		Cassia *mahál.*		Lac *mahal.*		Total revenue realised by the Revenue Department.	
	1883-84.	1884 85	1883-84.	1884-85.	1883-84	1884 85.	1883-84.	1884-85.	1883 84	1884 85	1883 84	1884-85.	1883-84.	1884 85	1883-84.	1884 85.	1883-84.	1884 85	1883-84	1884-85.	1883 84.	1884 85	1883-84	1884-85.
	Rs.	Rs	Rs.	Rs	Rs	Rs.	Rs	Rs	Rs.	Rs	Rs	Rs	Rs.	Rs	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction	.....	.. .	...	...	...	...	18	2	...	...	18	2	...	...	.....	.....	.....	.....	...	...	...	...	...	...
Gáro Hills	10,383	8,623	5,595	4,704	450	628	52	13	...	...	16,480	13,968	...	...	.....	.....	.....	.....	...	...	...	...	...	...
Goálpara	34,142	13,597	...	...	43	30	675	675	...	...	34,860	14,302	...	...	.....	.....	.....	.....	...	...	8	...	8	...
Kámrup	51,895	31,088	...	...	...	...	441	711	...	...	52,336	31,799	1,655	1,900	.....	.....	905	.....	...	...	9	20	2,569	1,920
Darrang and Nowgong.	4,764	6,188	...	...	...	...	60	106	3,014	3,203	7,838	9,497	...	35	3,545	7,169	22,395	22,380	...	...	45	55	25,985	29,639
Sibságar	6,110	4,985	...	...	267	...	270	466	971	1,534	7,618	6,985	...	...	627	3,432	.....	... ..	...	...	...	12	627	3,444
Lakhimpur	5,277	6,597	...	...	37	4	9	618	533	1,714	5,856	8,933	...	...	2,924	139	6,838	10,080	...	...	...	...	9,762	10,219
Cachar	24,598	30,332	...	...	3,902	2,720	681	569	...	...	29,181	33,621	...	...	4,732	4,751	1,000	850	...	...	...	...	5,732	5,601
Sylhet	3,787	7,273	...	...	...	...	14	23	...	...	3,801	7,296	...	...	2,757	1,520	.....	.....	...	...	...	...	2,757	1,520
Khási and Jaintia Hills	1,733	562	...	...	2,680	360	44	57	...	...	4,454	979	...	...	.....	.....	600	350	150	320	...	...	750	670
Nága „	12	18	...	...	...	...	...	...	...	...	12	18	...	...	.....	.....	800	.....	...	...	...	...	800	...
Total ...	1,42,701	1,09,[illegible]	5,595	4,704	7,379	3,742	2,261	3,240	4,518	6,451	1,62,454	1,27,400	1,655	1,935	14,585	17,011	32,538	33,660	150	320	62	87	48,990	53,013

Resolution on the Assam Forest Report for 1884-85.

Extract from the Proceedings of the Chief Commissioner of Assam in the Revenue Department, No. 2,434, dated Shillong, the 12th October 1885.

READ—

The Report on Forest Administration in Assam during 1884-85.

RESOLUTION.

Preliminary.

THE last portion of the manuscript of the Forest Report, which is due on the 1st August, was received in the press on the 28th September, and the Report was ready in print on the 3rd October. Mr. G. Mann was in charge of the Forest Department throughout the year, except during three months, from July to October, when Mr. Jellicoe officiated for him. The leading features of the forest history of 1884-85 are the steps taken to create forest reserves in Lakhimpur, the success attained in protecting the forests against fire, and a financial deficit in the working of the department, caused by the continuous depression of the timber trade in Calcutta.

Total area of forests.

2. Classified in the usual way, as reserved, protected, and district forests, the total area of forest lands in Assam stands as below:—

	Area in square miles on the	
	31st March 1884.	31st March 1885.
Reserved forests (Forest Act, Chapter II.)	2,314	2,342
Protected forests (Chapter IV.)	862	862
District forests	6,422	6,390
Total	9,598	9,594

Reserved forests.

3. The area of reserved forests in each district is as follows:—

	Reserved forests on the	
	31st March 1884. Square miles.	31st March 1885. Square miles.
Gáro Hills	79	87
Goálpára	455	455
Kámrúp	122	122
Darrang	274	302
Nowgong	8	8
Sibságar	94	94
Nága Hills	487	487
Khási and Jaintia Hills	50	50
Cachar	745	745
Total ...	2,314	2,342

The additions made during the year were the valuable Dambu reserve in the Gáro Hills (8 square miles), and an extension of the Charduár reserve in Darrang (20 square miles). Elsewhere, the reserved areas in districts remained unchanged. The Langai and Singla tract in South Sylhet has not yet been gazetted as a reserve, owing to claims of ownership alluded to in last year's Resolution. Notifications preliminary to reservation were published in 1884-85 respecting the Chhaygaon tract in Kámrúp (4¼ square miles), and an area of 243 square miles in seven blocks has been similarly notified in the Lakhimpur district.

Protected and district forests.

4. There was no change in the area of protected forests. District forests were diminished by the transfer of 16 square miles to reserves and by rectification of boundaries. The following table gives the statistics:—

	Area in square miles.	
	Protected forests.	District forests.
Goálpára	.....	222
Kámrúp	3	503
Darrang	.....	191
Nowgong	.....	345
Sibságar	30	363
Lakhimpur	459	3,532
Gáro Hills	.....	263
Khási and Jaintia Hills	.....	100
Nága Hills	.....	493
Sylhet	170	78
Cachar	200	300
Total.....	862	6,390

Clearing and inspection of boundaries.

5. The work done in inspecting and clearing boundaries and maintaining boundary-marks by forest officers in 1884-85 is shown in the subjoined table:—

Forest division.	Total length of boundaries. Miles.	Length inspected. Miles.	Length cleared. Miles.	Total number of boundary marks.	Number repaired.
Gáro Hills	102	45	72	168	120
Goálpára	83	69	69	401	349
Kámrúp	389	325	383	1,955	1,824
Darrang and Nowgong.	55	55	55	641	641
Sibságar and Nága Hills.	101	81	96	209	208
Lakhimpur	134	83	111	1,076	770
Cachar	70	37	70	641	641
Sylhet	6	6	6	25	25

Boundary work has generally been done on the whole as well in 1884-85 as in the previous year, but the Gáro Hills and Cachar show a falling off. In the latter district there does not seem to be any excuse, but the forest officer of the Gáro Hills can plead that a large portion of his time was taken up with work on the new road which is to open up the valuable Dambu reserve.

Surveys.

6. Surveys of the reserved forests are gradually being completed on the scale of 4 inches to the mile. This work is not conducted on any fixed topographical system, but according to departmental exigencies, the most important reserves being taken up first. The demarcated boundaries of all the reserves in the Province measure a linear length of 941 miles, and the surveys completed in 1884-85 account for a length of 218 miles. During the current year it is hoped that working plans will, for the first time, be prepared for the forests of Assam.

Measures of protection.

7. Prosecutions for breach of forest laws fell from 86 in number to 55, but the number of persons prosecuted rose from 152 to 163; of these, 109 were convicted and 54 acquitted. The bulk of the offences were cases of unauthorised appropriation of forest produce, but there were five cases of injury by fire, against three in 1883-84. The defence of the forests in Lower Assam against fire was eminently successful; there were 134,224 acres to be protected, and only 7,133 acres were burned, chiefly in the Kámrúp district, where the Singra and Ráni reserves, and the small reserve made last year on the Hajo hill, were swept by fire. In Goálpára, the Sidli reserve was fired five times, burning 1,150 acres, but the sharp punishment meted out to the offenders ought to prevent the commission of similar offences here in future.

Plantations.

8. Plantations are of minor importance in Assam, where there is no danger of the forests being overworked, and the most pressing necessity is rather to open them up to timber-dealers. The Caoutchouc plantation on the Kulsi in Kámrúp was increased by 46 acres, and that in Charduar of Darrang by 120 acres; the experiment of epiphytic planting in 30 acres of the latter reserve was also continued. In the Nambor forest, the area planted with Ajhar, Tun, and Nahor has been extended from 73 to 101 acres.

Roads and bungalows.

9. The great work of the year was the cart-road from Damra Hat in the Goálpára district to the Dambu reserve in the Gáro Hills. This is 27 miles long, and ascends 1,000 feet. The length completed in 1884-85 was 21 miles, with no fewer than 51 bridges. In Darrang, the road to Bhalukpung and Dijumukh was made passable for carts, and that along the southern boundary of the Charduar reserve was improved. The track from the Nambor forest to the Mikir Hills reserve (62 miles) was also improved, though it is not yet fit to be classed as a bridle-path. In Cachar, the path through the Katakhal reserve (22 miles) was similarly dealt with. In buildings, the principal works were the forest officer's bungalow in Dibrugarh, completed in 1884-85, and the bungalow at Tura, which was finished all but the roof.

Working of the forests.

10. The forests are worked entirely by private agency, except in so far as the department needs timber for its own use. A trade permit costs 8 annas in the Assam Valley and the North Cachar hills, and a rupee elsewhere; in the Surma Valley and the Jaintia Hills one rupee is also charged for every elephant used to drag timber. Permits to ryots for home consumption are given gratis in the Assam Valley, and in the Surma Valley for 8 annas; in the Gáro Hills, *garkáti* licenses to cut timber for sale are given to Gáros on payment of 6 annas and to outsiders on payment of Rs. 2. Permits to cut firewood for sale in the Assam Valley are also given on payment of a fee of one rupee a month or Rs. 9 a year. The following table shows the number of permits of all these kinds which were given in 1884-85 :—

	Number of permits.
Garkáti	3,461
Trade permits	5,019
Elephant permits	127
Home permits	3,411
Firewood permits	763

The total amount of fees realised was Rs. 10,188. The permit system is now thoroughly understood by the people, and works easily. Home permits are not required to be taken unless the ryot desires to get a large quantity of wood or other forest produce for building or repairs. The ordinary wants of his hearth and homestead may be supplied without any reference whatever to the forest authorities.

Outturn of timber.

11. Excluding dead wood, charcoal, bamboos, cane, and thatching-grass, the following table shows the outturn of timber from the Government forests during 1883-84 and 1884-85 :—

Forest division.	Number of logs, 1883-84.			Number of logs, 1884-85.		
	Sâl.	Other reserved trees.	Unreserved trees.	Sâl.	Other reserved trees.	Unreserved trees.
Goálpára	1,312	513	38	1,064	161	136
Kámrúp	4,014	382	53	2,322	190	129
Darrang-Nowgong ...	111	459	878	54	752	1,606
Sibságar	.....	797	364	.....	443	1,138
Lakhimpur	.....	536	900	.....	482	1,407
Total Assam Valley ...	5,437	2,687	2,233	3,440	2,028	4,416
Gáro Hills ...	391	404	194	131	203	135
Khási and Jaintia Hills ...	64	...	37	2	5	...
Nága Hills	.....	2	...	.....	3	...
	Logs, posts, and planks.			Logs, posts, and planks.		
Sylhet	683			963		
Cachar	6,306			7,001		
Total Surma Valley ...	6,989			7,964		

The year 1884-85 thus repeats the features of its predecessor, *viz.*, a diminishing outturn from the forests of Lower Assam (Gáro Hills, Goálpára, Kámrúp), and an increasing outturn from the forests of Upper Assam and of the Surma Valley. The causes are the same as before; the forests of Lower Assam, being worked by timber dealers from Bengal, are dependent mainly upon the state of the market in Calcutta, and their working was seriously affected by the depression in trade; while in Upper Assam and the Surma Valley the forests supply local demands chiefly, and the trade is less liable to external disturbing influences. The decreasing export of timber from private forests in Cachar

(8,361 logs, against 14,208 last year) seems to show that private forests have been overworked, and that purchasers will be obliged to resort to the Government forests more largely in future.

Receipts of the department.

12. Mr. Mann has shown the receipts of his department in a very lucid statement prepared in accordance with the wish expressed in the review of his report for 1883-84. They are as follow :—

	1883-84. Rs.	1884-85. Rs.
Royalty on forest produce	1,42,701	1,09,263
Garkáti	5,595	4,704
Duty on imported timber	7,379	3,742
Miscellaneous	2,261	3,240
Total realised by Forest Department	1,57,936	1,20,949
Realised by tahsildars and mauzadars	6,173	8,386
Value of timber on waste lands taken up	14,585	17,011
Rubber-*mahâls*	32,538	33,660
Cassia "	150	320
Lac "	62	87
Total realised by Revenue Department	53,508	59,464
Grand Total receipts	2,11,444	1,80,413

The decrease in royalty has been explained above. It falls heaviest in the divisions possessing sâl forests, the demand for this kind of timber in Calcutta during 1884-85 having been almost *nil*. In the Goálpára and Kámrúp divisions alone the loss from this circumstance amounted to Rs. 40,739. The decreased receipts from the duty on imported timber are the result of smaller imports from Manipur and Lushai territory, and also to the less extensive working of the Jirang forest in the Khási Hills, whose owner shares the profits with the Government. The realisations by tahsildars and mauzadars are made in their capacity as subordinate forest officers in district forests. The other heads need no explanation.

Expenditure.

13. The following table shows the expenditure of 1884-85, classified under the heads prescribed by departmental rules :—

A.—Conservancy and Works.

		1883-84. Rs.	1884-85. Rs.
1.	Forest produce removed by Government agency	1,247	2,687
2.	Ditto ditto by private agency	6,751	6,070
3.	Confiscated and drift wood	54	68
4.	Live and dead stock	14,354	13,990
5.	Communications and buildings	20,994	24,067
6.	Demarcation and maintenance	43,110	43,083
7.	Miscellaneous	4,132	4,773
	Total Conservancy and Works	90,642	94,740

B.—Establishments.

8.	Salaries	89,584	82,970
9.	Travelling allowances	15,342	16,295
10.	Contingencies	3,994	3,695
	Total Establishments	1,08,920	1,02,960
	Grand Total	1,99,562	1,97,700

The cost of collecting timber for the forest officer's bungalow at Tura accounts for most of the expenditure under head (1). The decrease under head (2) is the consequence of entertaining a smaller number of guards to watch the diminished operations of the year. Under live stock, only one elephant was bought in 1884-85, against two bought in the previous year. The Dambu road explains the increase under head (5). Mr. Ludlow's death and Mr. Mein's furlough explain the decrease in salaries. The increase in travelling allowance is mainly the result of the more favourable rates granted to subordinate officers by the new Travelling Allowance Code.

14. The general financial results of the year are a surplus in the Surma Valley amounting to Rs. 27,522, in Darrang of Rs. 11,733, in Kámrúp of Rs. 4,454, and a deficit everywhere else; the net deficit of the whole department amounting to Rs. 17,286. Mr. Mann remarks that if the timber given free of royalty to the Assam Railways and Trading Company were valued and reckoned in, this deficit would be converted into a surplus of Rs. 12,426. On the other hand, Darrang is obviously indebted for the whole of its surplus, and Lakhimpur for its comparatively small deficit, to the sums realised by the sale of their rubber-*mahâls* (Rs. 22,380 and Rs. 10,080 respectively); a source of income which existed before there was any forest department in Assam, and which is still managed by Deputy-Commissioners, though the forest officials may do useful work in preventing the impoverishment of the *mahâls* by overtapping. The deficit is the first on record since 1876-77, and it is hoped that with the revival of trade the normal condition of things may be restored, and the department again enabled to show a yearly surplus.

General financial results.

15. Mr. Mann has administered the department with his usual ability and energy, and, notwithstanding the diminished receipts, the year has been marked by progress in the work of placing the forests of Assam upon a good administrative footing.

Conclusion.

By order of the Chief Commissioner of Assam,

E. STACK,

Officiating Secretary to the Chief Commissioner of Assam.

A. S. Press (Revenue) No. 59—450—12-10-85.

No. 1139 F., dated Calcutta, the 7th December 1885.

From—A. MACKENZIE, Esq., C. S., Secretary to the Government of India.

To—The Chief Commissioner of Assam.

I am directed to acknowledge the receipt of your letter No. 2444 of the 13th October last, submitting the Progress Report of Forest Administration in Assam for the year 1884-85, together with your Resolution thereon.

2. The changes in the constitution of State Forest property were as follow :—

Class of Forest	At the commencement of the year.	Added.	Excluded.	At the close of the year.
	Square miles.	Square miles	Square miles	Square miles.
Reserved Forests	2,314	29	1	2,342
Protected do.	863	...	...	863
District do.	6,422	...	32	6,390
Total ...	9,599	...	4	9,595

These changes were due to the transfer of 17 square miles of District Forests to the class of Reserves, which latter were also increased by 11 square miles, owing to re-measurement of existing Reserves, making a total of 28 square miles, distributed as follow :—

	Square miles.
Garo Hills	8
Darrang District	20
Total ...	28

The other unimportant changes which took place are accounted for by rectification of boundaries.

The area of Reserves amounts as yet to only 5·11 per cent. of the total area of the province, and it is consequently noticed with satisfaction that the early reservation of large additional areas, amounting to some 255 square miles, is under contemplation. These areas are with one exception situated in the Lakhimpur District.

The maintenance of the boundaries of the Forest Reserves has received considerable attention.

3. Forest surveys have been undertaken departmentally, and, up to the end of 1884-85, the length of boundary surveyed on the scale of 4″ to a mile amounted to 218 miles, out of a total of 941 miles of Reserve boundaries. Future Reports, I am to state, should mention whether these surveys are mere boundary surveys, or whether they contain interior topographical details. The amount of work done should, as usual in such cases, be computed by square miles, and the cost per square mile, including the pay of the officers employed on the survey, should be given.

The necessity for the preparation of working-plans for the valuable sal forests in the Garo Hills, and in the Goalpara and Kamrup Districts, has been acknowledged, and His Excellency in Council is pleased to notice that the Conservator intends to organize a special Branch for the collection of data necessary for the compilation of such Plans.

4. The number of cases of breaches of the forest law brought to notice was as follows :—

Year.	Number of new cases			Percentage of convictions to total number of cases decided by the courts.
	Taken into court.	Compounded.	Total.	
1884-85	55	34	89	69
1883-84	86	45	131	65
Increase or decrease in 1884-85 .	—31	—11	—42	4

There has been a large falling off in the number of cases, both of those taken into court and those compounded, whereas the percentage of convictions has slightly risen. The falling off in the number of offences is attributed to the fact that the intentions of Government, as expressed in the rules for District Forests, are gradually being understood by the people. These rules permit, for local demands, a practically free user of all forest produce except timber of reserved trees in all District Forests. That, under such circumstances, forest offences are few is natural.

The offences under notice contain five cases of injury by fire. It is hoped that the prompt punishment of the offenders in these cases will have a salutary effect. The Report shows that an example was much called for in more than one district.

5. The results of fire protection during the year under review, as compared with those of the previous year, are exhibited as follow :—

Year.	Area attempted.	Failures.	Area protected.	Percentage of failures to area attempted.	Cost per square mile protected.
	Square miles.	Square miles.	Square miles.		Rs.
1884-85	210	11	199	5	52
1883-84	209	61	148	29	64
Increase or decrease in 1884-85.	1	—50	51	—24	—12

His Excellency in Council notices with pleasure that a very great improvement has taken place, and trusts that, since it has been shown what can be effected in a dry season, which has been reported as specially long and severe, there will be no relapse to the former state of things.

The cost per square mile actually protected has decreased from Rs. 64 to Rs. 52. This is still very high, but cannot probably be reduced till larger blocks are protected, and till fire protection throughout the country becomes more general. The area of Reserved Forests, which, by nature, are not, as a rule, subject to conflagrations, is given at 1,640 square miles, and I am to suggest that it may be considered whether a perfect and continuous immunity from forest fires might not be secured in these areas at a comparatively small cost.

6. The natural reproduction of the sal forests is described as excellent, and that of the mixed forests as luxuriant, but frequently uncontrollable, as no demand exists for the inferior species of trees. This is only a question of time and the natural development of the country. In the meantime I am to suggest, with special reference to paragraph 51 of the Conservator's Report, a careful study of the teak taungya system as practised in British Burma, with the view of considering the advisability of introducing into Assam that method of transforming an inferior forest into a more valuable one. Otherwise artificial cultivation, except that of Rubber trees, is for the present out of place in Assam.

The Rubber plantations were, during the year, extended by 145 acres. They now comprise 1,168 acres, which have cost Rs. 85,929, or Rs. 73½ per acre.

7. It is noticed with satisfaction that increased efforts have been made to open out some of the more valuable forests by the construction of cart-roads.

8. The following table, compiled from Form No. 63 appended to the Report, exhibits the outturn of the Government Forests in Assam proper :—

Class of Forests.	Number of trees.			Total.		Poles, Boats, Dead Wood, &c.	Grand Total.
	Sal.	Other valuable trees reserved in Protected and District Forests.	Miscellaneous trees.	No.	Cubic contents.		
						C. ft	C. ft.
From Reserved Forests ...	2,676	460	1,468	4,604	138,120	92,875	230,995
" Protected and District Forests.	897	1,779	3,083	5,759	172,770	108,475*	281,245
Total in 1884-85 ...	3,573	2,239	4,551	10,363	310,890	201,350	512,240
" in 1883-84 ...	5,892	3,093	2,464	11,449	343,470	321,515	664,985
Increase or decrease in 1884-85 ...	—2,319	—854	2,087	—1,086	—32,580	—120,165	—152,745

* Includes 100 sleepers and 99 planks and other small pieces, containing *about 600 cubic feet*, brought out of the Lakhimpur and Nowgong District Forests, respectively.

There has been a further falling off in the yield of sal and other valuable trees, which is ascribed to a slackness in the Bengal timber market and the consequently failing demand. The distinction between reserved and unreserved trees in Reserved Forests is a misnomer and should be abandoned.

The yield of the Government Forests in the Cachar and Sylhet Districts, as compared with that of the previous year, is shown as follows :—

Year.	Logs.	Posts and Planks.	Firewood.	Total.
	C. ft.	C. ft.	C. ft.	C. ft.
1884-85	254,559	2,491	9,710	266,760
1883-84	221,425	92	6,828	228,345
Increase in 1884-85 ...	33,134	2,399	2,882	38,415

The slight increase in the outturn of the Government Forests has been more than counterbalanced by a decrease in the yield from Private and Foreign Forests.

9. The Government Forests—Reserves as well as Protected and District Forests—are exploited entirely by private agency under a permit system. It should be explained how, under these circumstances, a more conservative utilization is enforced in the case of the Reserves. It is understood that any overworking of the forests in Upper Assam is at present out of the question, but it is necessary to guard as scrupulously against a deterioration in their composition. Home permits for large quantities of wood for building, or permission to the people of the country to supply the wants of every day life, are given in District Forests with great liberality. This is as it should be in a forest country like Assam, but in Forest Reserves such permission should only be granted in special cases and after most careful consideration. The Forest Reserves are what the country will ultimately have to depend upon, and must always be judiciously and cautiously managed.

The sale of Rubber Mahals realized Rs. 28,660, and the subtraction of the amount of Rubber imported from that exported seems to show that the local yield has decreased by 1,312 maunds during the year under review. 6,632 trees were given free of royalty to the Assam Railways and Trading Company, which represents a loss of income to the State amounting to Rs. 25,948.

10. Local demands are at present still met from the extensive forests alienated, with extravagant liberality, in the earlier days of tea cultivation, and which are now in private possession, as well as from District Forests, the free user of which is practically permitted. Under these circumstances, the income realizable from the State Forest property in Assam depends as yet, to a great extent, on the trade with Bengal and on the construction of large public works. During the year under review this trade has been almost at a standstill, and the timber used for Railway construction has been given free of charge. The consequence is a Deficit, as exhibited in the following table :—

Year.	Receipts	Charges	Surplus or Deficit
	Rs	Rs	Rs.
1884-85	1,80,413	1,97,699	—17,286
1883-84	2,11,445	1,99,562	11,883
Decrease in 1884-85 ...	31,032	1,863	29,169

11. Independently of the unfavourable financial results of the year's Forest Administration, the Report under review discloses an active and energetic management.

No. 1140 F.

Copy forwarded to the Inspector General of Forests to the Government of India for information, with reference to paragraph 3.

Appendix showing the discrepancies noticed in the Forms appended to the Report of Forest Administration in Assam for 1884-85.

FORM No. 49.

(*Protected Forests.*)

The correct equivalent of 552,308 acres is 863, and not 862, square miles.

FORM No. 50.

(*Plantations.*)

For the column of "Total area on 31st March 1885," opposite the Shillong Timber Plantation, there should have been a footnote to the effect that the 8 acres of that plantation had been abandoned or excluded (*vide* paragraph 140 of the Report), as has been done in the case of the one acre abandoned in the Bamani Hill Caoutchouc Plantation.

FORM No 59.

(*Outturn of Timber and other Produce cut and collected by Government Agency.*)

Under "Abstract of the Circle," the entry opposite India-rubber should have been shown as 6 maunds and 37 seers, instead of 637 maunds.

Government of India Central Printing Office.—No. 319 H. D.—12-12-85.—210

Exd —N. C. D.

PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

PROVINCE OF ASSAM

FOR THE YEAR

1885-86.

By GUSTAV MANN,
CONSERVATOR OF FORESTS, ASSAM.

SHILLONG:
PRINTED AT THE ASSAM SECRETARIAT PRESS.

1886.

No. 91A.

FROM GUSTAV MANN, ESQ.,

Conservator of Forests, Assam,

TO THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Dated Shillong, the 6th August 1886.

SIR,

I HAVE the honour to submit the Annual Forest Administration Report for the year 1885-86.

2. The financial figures entered are only preliminary, as the final statements from the Comptroller and Auditor-General have not yet been received. I will make any corrections which may become necessary, when receiving the proof sheets of the report.

I have the honour to be,

SIR,

Your most obedient Servant,

GUSTAV MANN,

Conservator of Forests, Assam.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN ASSAM

FOR THE YEAR 1885-86.

By GUSTAV MANN,

Conservator of Forests, Assam.

INTRODUCTION.

An important step in advance, as regards forest management in Assam, was taken during the year: it consisted in the organisation of three new forest divisions, that of Working Plans, the Nowgong, and the Sylhet divisions.

2. In the first of these not much could be accomplished, as the additional officer applied for was not posted to Assam, in consequence of which, both this and the Gáro Hills division had to remain in charge of one officer. A beginning was made, however, which is something in a Province where exceptional difficulties beset new works on all sides.

3. The Nowgong division was part of one of the old divisions, but it never had a chance of doing much good up to this without a separate officer and a stronger subordinate establishment, such as have been appointed now.

4. The Sylhet division was hitherto only a division by name, since the Deputy-Commissioner and his fiscal officers had their hands so full of other important works that no time remained for forest management, which essentially needs a special agency, such as was appointed during the year.

5. The area of reserved forests added during the year is 18·72 square miles, 294 square miles were proposed as reserves, and all the necessary information was collected for the proposal of 301 square miles more in the current year.

6. Survey work was until January 1886 carried on, as heretofore, under the different Divisional Officers; but after that it was allotted to the officer in charge of the Working Plans Division until a party of the Imperial Forest Survey Branch can be deputed to Assam; it has been confined since then to the Gáro Hills, where the survey of the Dambu forest was completed.

7. The clearing of boundaries received the same attention as in former years. 876 miles out of a total of 988 miles were inspected by the Divisional Officers.

8. The general protection of the forests in Assam has been greatly improved during the year by the appointment of separate Divisional Officers for the districts of Nowgong and Sylhet.

9. The protection of the sâl forests against fire was most successful, in spite of a very unfavourable season.

10. The prosecutions for breaches of forest rules have been even fewer than in the previous year, and mauzadars as a body are taking more and more interest every year in their forest charges.

11. Plantation work had to be restricted, on account of the retrenchments ordered by Government, but the growth in all the plantations established in former years is most luxuriant, and all that could be desired.

12. The construction of the Dambu cart-road was completed, and thus the working of one of the most valuable forests in the Province, from which no timber had ever been removed, was rendered possible.

13. The bungalow for the Divisional Officer at Tura in the Gáro Hills was also completed, and all the numerous inspection-houses and huts for subordinates in different parts of the Province were kept in repair.

14. There was an increase in the yield of the forests, but the export trade in sâl has scarcely improved in the year; there are, however, signs of its recovering.

15. The financial results have still been a deficit, although receipts were Rs. 16,243 more than in the previous year. The causes of this were, on the one hand, the failure in the working of the Dambu forest by contractors, which kept down the receipts by Rs. 20,000, and, on the other, the adjustment of heavy advances made in 1884-85 in the Gáro Hills and Lakhimpur divisions, which unavoidably increased the expenditure; both these occurrences will tend to increase receipts and keep down expenditure in 1886-87.

CHAPTER I.

Area and Boundaries.

Area of reserved forests.

16. The additions to the Government reserves in Assam have been the Songsak Forest in the Gáro Hills, and the Chhaygaon Forest in the Kámrúp district, measuring in the aggregate 11,985 acres, or 18·72 square miles, as shown in the following statement:--

Name of district.	Name of mauza.	Name of forest.	Area.
Gáro Hills	Mauza No. 4	Songsak	9,280
Kámrúp	Chhaygaon.....	Chhaygaon	2,705

Both these newly-declared reserved forests are sâl, and very valuable.

17. The Jhansi reserve in the Sibságar district, extending over an area of 29 square miles, has become again a district forest, as the *Kumpungia* and *Ooramung* independent Nágas had preferred claims to the greater portion of this forest, which claims it was deemed advisable, for political reasons, to comply with, and to select reserves in other parts of that district instead.

18. The large area of 251·13 square miles, proposed as reserves in the previous year in the Lakhimpur district, has not been finally gazetted up to date, because the Forest Settlement Officer appointed was prevented, by other pressing work, from leaving the sadr station. Representations were made to the Chief Commissioner regarding this delay, and the Deputy-Commissioner of the district has now been appointed Forest Settlement Officer, and the Commissioner of the Valley Districts has been appointed, under the provisions of Section 16 of the Forest Act, to hear appeals from the orders of the Forest Settlement Officer.

19. An interesting report regarding the Langai and Singla proposed reserve in the Sylhet district was submitted by the Forest Settlement Officer, Mr. Porteous, recommending that it should be made a reserve, with the exception of a small area, which had to be given up for *jhúming*; the matter is still under the consideration of the Chief Commissioner.

20. Owing to the defective manner in which private estates are demarcated in this Province, fresh complications arose again during the year regarding the boundaries of an addition to the Charduar reserve, proposed as long ago as 1879-80; but it is hoped that the settlement will be completed during the current year.

21. The survey of a new southern boundary of the Bijni forest in the Eastern Duárs of the Goálpára district was completed. This forest has been gazetted as a proposed reserve under Section 4 of the Forest Act, since the close of the year.

22. The tabular statement No. 49, attached to this report, shows the total area of reserved forests in Assam at the end of 1885-86. The boundaries of the new additions made during the year have been recorded in the Register of Reserves, Appendix I. of this report.

Statement No. 49 shows a decrease of 596 acres in the Dambu reserve in the Gáro Hills, and an addition of 17 acres in the Hajo reserve in the Kámrúp district, which rectifications are the results of re-measurement.

Area of proposed reserves.

23. The new areas selected and gazetted as proposed reserves under Section 4 of the Forest Act were the following:—

Name of district.	Name of mauza.	Name of forest.	Area in square miles.
Nága Hills	Barpathar	Kaliani Reserve	81
Ditto	Ditto	Diphu ditto	65
Ditto	Ditto	Rongma ditto	53
Sibságar	Ghiladhari and Mokrung ...	Dayang ditto	95
		Total	294

Area of protected forests.

24. No additions were made to the area of protected forests during the year, but the Conservator inspected the district forests of Sylhet, and submitted proposals regarding the six principal forests in that district, covering an area of about 233 square miles, which have been gazetted since the close of the year as protected forests under the Forest Act.

Area of district forests.

25. The area of district forests has been increased by the throwing up of the Jhansi reserve, and several areas held formerly under the Waste Land Rules, but given up during the year; whilst, on the other hand, they have decreased by the area of the two reserved forests gazetted during the year. These changes are shown in Statement 49 of this report.

Boundary work.

26. The demarcated boundaries of the Government forests in Assam measure not less than 988 miles. They are, as far as practicable, cleared every year, and the boundary-marks repaired where necessary. The importance of this work fully recognised, and receives every attention from the Conservator and the Divisional Forest Officers. Appendix II. of this report shows the amount of clearing done and the boundaries inspected by the Divisional Officers during the year.

27. The expenditure on demarcation has been higher by Rs. 526 than in the previous year, which is accounted for partly by the new work carried out in the Gáro Hills and Goálpára divisions, but also by the adjustment of advances made the year before in the Lakhimpur and Cachar divisions on account of this work.

The proportion in which the total expenditure of Rs. 9,018 on demarcation work is distributed amongst the different divisions will be seen from the Summary, Statement No. 58 of this report.

Compensation paid.

28. The compensation paid during the year amounts to Rs. 350 only, and most of this, Rs. 301, was paid in the Goálpára division for land taken up for the Government timber depôts at Kochukata and Damra, to enable the wood-cutters, who work in the Government forests, to stack their timber without its becoming liable to the imposition of *thaljat* by the zamindars. In the Lakhimpur division Rs. 12 were paid on account of a building site for an inspection hut in North Lakhimpur, and in the Cachar division Rs. 37 were paid for land taken up for a patrol post, where the huts of the forest guards were built.

Account of changes in area and boundary work according to divisions.

29. The changes in areas of forests and the boundary work done according to divisions were the following.

Gáro Hills division.

30. The area of the Government reserved forests in the Gáro Hills was increased during the year by the Songsak reserve, measuring about 14·5 square miles, or 9,280 acres, and a careful resurvey of the Dambu forest showed that the area of this forest was about 596 acres less than had been calculated from the preliminary survey.

31. Of the newly-gazetted Songsak reserve, about half is well stocked with mature Sâl and an abundance of younger trees and seedlings, whilst the other half is inferior on account of *jhúming* carried on in former times. It is hoped, however, with proper care soon to reclaim this portion also, and to make it as valuable a Sâl forest as the best of this reserve is now.

32. The Deputy-Commissioner's investigations regarding the Bagmara Sâl forest, covering an area of about 16 square miles, were completed during the year; it has since been gazetted under Section 4 of the Forest Act.

33. The area of the district forests in the Gáro Hills has been diminished by making the Songsak forest a reserve.

34. The work done in the Gáro Hills in keeping up the boundaries of the Government reserved forests is shown in Appendix II. Out of a total length of demarcated boundaries of 116 miles, which were all cleared, the Divisional Officer inspected 101 miles, and all boundary-mounds, 159 in number, were repaired where necessary.

35. The total expenditure on boundary work was Rs. 847, which makes the average cost per mile Rs. 7-4-10. This is moderate.

Goálpára division.

36. The area of Government reserved and district forests in the Goálpára division remained unchanged during the year. No protected forests exist.

37. The question of adding to the Bijni reserve has again been under the consideration of the Chief Commissioner during the year, and final orders were passed about the southern boundary of the addition. This forest has been proposed since the close of the year under Section 4 of the Forest Act. It covers an area of about 100 square miles.

38. Out of 88 miles, the total length of demarcated boundaries of reserves in the Goálpára division, all of which were cleared, 74 miles were inspected by the Divisional Officer, and out of the total number of 421 boundary-marks, 345 were repaired during the year under report. Further details about this work will be found in Appendix II. of this report.

39. The expenditure on boundary work has been Rs. 486, or an average of Rs. 5-8-4 per mile, which is less than last year.

Kámrup division.

40. The area of Government reserved forests in the Kámrúp division was increased by 2,722 acres, or 4·25 square miles, 2,705 acres of which comprise the newly-gazetted Chhaygaon reserve, and 17 acres were added to the Hajo reserve by the rectification of its boundaries.

41. The area of district forests in the Kámrúp division is reduced to the same extent by the gazetting of the above new reserve.

42. The boundary work done is shown in Appendix II. attached to this report. The length of demarcated boundaries in this division is exceptionally great, there being not less than 380 miles, out of which 278 miles were cleared, and 348 miles inspected by the Divisional Officer. The total number of 1,760 boundary-marks were all repaired, where necessary.

43. The cost of boundary work during the year in the Kámrúp division was Rs. 394, or Re. 1-0-8 per mile, which is very small, and explained by the fact that many of the boundaries have been cleared by the villagers in the neighbourhood, in return for the free grant of dead posts, firewood, and other smaller privileges allowed them by the Divisional Officer. This arrangement is very commendable and worth adopting in other divisions, where practicable.

The decrease of Rs. 699 in the expenditure on this work, as compared with that of the previous year, is explained by no new demarcation having been carried out in the year under report.

Darrang division.

44. The area of the reserved forests in the Darrang division remains the same as in the previous year, whilst the areas of district forests was reduced by 2,430 acres having been leased for tea cultivation, 318 acres were resumed by Government, making the net decrease in the area of district forests 2,112 acres.

45. The proposed addition to the Charduar reserve, comprising 3,167 acres, which has been under consideration of the Deputy-Commissioner for the last six years, could not be gazetted, because fresh complications arose about the boundaries of the adjoining private estates.

46. Out of a total length of 30 miles of boundary-line, 18 miles were cleared and 21 miles inspected by the Divisional Officer. The expenditure on this work was Rs. 128, or Rs. 7 per mile.

Nowgong division.

47. The area of reserved forests in the Nowgong division remains unaltered. An additional area of about 103 square miles has, however, been selected during the year as reserves, and the usual proposals been submitted to the Chief Commissioner for orders. The area of district forests was increased by 2,166 acres, which were resumed land granted formerly for tea cultivation.

48. The boundary work in the Nowgong division has been considerably increased by the newly-selected reserves. There are now in this division 56 miles of boundaries, the whole of which was cleared and inspected by the Divisional Officer.

49. The expenditure on demarcation work has been Rs. 988, which is much less than what had been spent under this head in the previous year. The decrease is accounted

for by less original work having been done. The average cost per mile according to the above was Rs. 17. This is still high, and no doubt will in future years be considerably less.

Sibságar division

50. Owing to claims preferred by the *Kampungia* and *Ooramung* Nágas to part of the Jhansi reserve, and because it was not worth while to risk political complication with these tribes by refusing to grant their claims, the Chief Commissioner gave up this forest. This decision was approved of by the Government of India, and the area of reserves temporarily made less by 29 square miles. Proposals were, however, submitted during the year to have four other forests, covering an area of 294 square miles, made Government reserves. This proposal was gazetted under Section 4 of the Forest Act.

51. The area of the protected forest in the Sibságar division remained the same as in the previous year, and the district forests have been increased by 29 square miles, the former Jhansi reserve. The Nágas who claim part of this forest do not object to timber being cut in it under the orders of Government.

52. The demarcated boundaries in the Sibságar division extends over a length of 114 miles, of which 102 miles were cleared and inspected by the Divisional Officer; but out of 230 boundary-marks only 16 were repaired.

In addition to the existing reserves, the newly-proposed Kaliani, Diphu, Rengma, and Doyang forests were temporarily demarcated, adding 10 miles of boundary and 20 boundary-marks to the above.

53. The expenditure on demarcation work in the Sibságar division during the year under report has been Rs. 548, or nearly Rs. 300 less than in the previous year, which reduction in expenditure was effected by having cleared some of the boundaries to half the former width only, and by restricting the repairs of the boundary-marks to only such as wanted it most. The average cost of boundary work was Rs. 5 per mile, which is moderate.

Lakhimpur division

54. In the Lakhimpur division there are nominally no reserves as yet, because, as already stated, the Forest Settlement Officer was prevented by other duties to report on the forests proposed as reserves. They remain, therefore, protected forests only; but they are demarcated, and in every respect managed in the same way as reserves. No addition to, or alteration in, the area of the protected forests took place during the year.

The district forests have decreased by about 1,943 acres, or 3 square miles, on account of lands allotted during the year for cultivation.

55. The demarcated boundaries of the Government protected forests in the Lakhimpur division measure 134 miles, out of which 128 were cleared and 106 inspected by the Divisional Officer. All boundary-marks were repaired where necessary.

56. The total expenditure in the Lakhimpur division on demarcation work during the year was Rs. 4,160, or Rs. 32 per mile. This is Rs 1,241 more than in the previous year, instead of which it should have become less, because no original work, or only a very trifling amount, was done.

57. This unsatisfactory state of things the Divisional Officer ascribes to the adjustment, in the year under report, of advances made in the previous years, which, however, does not make the expenditure on demarcation work as a whole less, inasmuch as the advances paid and not adjusted last year, made the work done then appear cheaper as it really had been, and the praise in last year's report for the reduced cost of this work was, therefore, bestowed under a misapprehension.

Cachar division.

58. The area of Government reserved forests in the Cachar division has remained unchanged; but a small area of about 335 acres of grass land and inferior forest in the Dhaleswari reserve were, in accordance with the orders of the Chief Commissioner, surrendered for cultivation. Applications were also received in the year for the *bhils* or swamp land between the different ranges of hills for tea cultivation.

59. The area of the protected forests in the North Cachar Hills remains also the same as in the previous year. Out of the total area of 289 square miles of district forests in Cachar, 78 square miles are within revenue limits and 211 square miles beyond, and of the former 7·41 square miles were, during the year, allotted for cultivation under the Mirasdari Rules for 15 years.

60. The boundary work in the Cachar division in the year under report has received proper attention from the Divisional Officer, the whole length of 68 miles, except 2, having been cleared and inspected, and all the boundary-marks, of which there are 624, been repaired where necessary. As funds were very short in the year under report,

most of the boundary-lines have only been cleared to a width of 10 feet. This is quite sufficient to distinctly recognise the boundary-lines.

61. The boundaries of the land allotted to the two Kuki villages, Arkhai and Naraindhar, in the Barak reserve, were kept clear by the villagers without any expense to Government.

62. The cost of boundary work in the Cachar division has been Rs. 1,466, or Rs. 22 per mile, as compared with Rs. 14·4 in the previous year, which is very high, and also due to the adjustment of advances made for work done in the previous year.

Sylhet division

63. The Settlement Officer who was appointed for the Langai and Singla forest has submitted his report during the year, but final orders to gazette it as a reserve have been deferred by the Chief Commissioner until he can personally visit the locality.

64. The portion of the northern boundary of this forest, which consisted of a survey line, has been given up, and a natural boundary been chosen instead.

65. The following six tracts were selected as protected forests, and have since the close of the year been gazetted as such:—

	Name.	Area in square miles.
(1)	Raghunandan Hills	53
(2)	Taruf	59
(3)	Putijuri Hills	64
(4)	Dinarpur	13
(5)	Patharia Hills	60
(6)	Dowalia „	9

Khási and Jaintia Hills division.

66. The area of the Saipung forest, which is the only reserve in the Khási Hills, remains unchanged. The forests on the Shillong estate and its neighbourhood, although not gazetted as reserves under the Forest Act, are strictly protected as if they were reserves, they were obtained either by purchase or are held on long leases, because the Khási Hills belong to the people, and have never been appropriated by Government.

The forests are demarcated by masonry pillars, which are kept in proper repair, and the boundaries are all cleared every year as fire-lines, since the forests are chiefly Pine.

Nága Hills division.

67. The area of the forest protected in the neighbourhood of Kohima in the Nága Hills, which has been reserved for the growth of timber, remains unchanged.

CHAPTER II.

Surveys, Working Plans, and Plans of Operation.

Survey work.

68. Survey work was carried on, as hitherto, in the different divisions of the Province wherever it was most necessary for the efficient protection of the forests, until January 1886, and comprised mainly boundaries of reserve forests. After this, the native surveyors were employed in the Dambu forest in the Gáro Hills.

Account of survey work according to divisions

69. The following is the work carried on during the year in the different divisions.

Garo Hills division

70. In the Gáro Hills the Dambu reserve, extending over an area of 6·82 square miles, or 4,364 acres, was surveyed in detail, showing the extent of the different descriptions of forests, the streams, roads, and paths, as well as the general configuration of the land.

71. This work has had to be carried on under exceptional difficulties, because the native surveyors were men who required to be taught and very closely watched by the officer in charge, who himself was much occupied by other duties, as he had also to remain in charge of the Gáro Hills division, because the trained officer from home, whose services had been reckoned on, was not posted to Assam.

72. Besides this, the climate of the place is most trying, and the locality much out of the way, so that all food had to be carried long distances for the men, whilst the ground itself was also exceptionally difficult as regards the cutting of survey lines, and labour very scarce and hard to procure, as well as to keep after it has been brought to the place, so that the Divisional Officer, Mr. Campbell, had much difficulty in completing the survey of this forest. With the experience now gained, and a better set of subordinates, most of these difficulties will not prevail in future.

73. This survey work was closed on the 10th of May. It necessitated observing 819 angles and measurement of 6,722 chains at a cost of Rs. 1,065, out of which Rs. 502 were spent in 1885-86 and Rs. 563 in 1886-87. The balance of the expenditure under this head in the Gáro Hills in 1885-86, Rs. 737, was spent on the survey of the Dambu road.

74. In accordance with the instructions contained in the Government of India orders on last annual report, the cost of this survey of the Dambu forest has been calculated at Rs. 177 per square mile, which includes one-eighth of the Divisional Officer's pay during the four months the survey was carried on.

75. In addition to the survey of the Dambu forest, a boundary survey of the proposed Bagmara reserve, covering an area of 16·25 square miles, was carried out by Forest-ranger Babu Nil Kantha Mukherji, under the directions of the Divisional Officer. This forest has since the close of the year been gazetted under Section 4 of the Forest Act.

Kámrúp division

76. In the Kámrúp division, no survey work was done beyond that of a few boundaries of reserves which wanted correcting.

Darrang division.

77. In the Darrang division the extensions of the Charduár Rubber Plantationt made since 1877-78, were surveyed by Forest-ranger Babu Dina Nath Kar, without additional expense; and, similarly, the southern boundaries of the Khalingduár reserve were resurveyed by the Divisional Officer without extra cost, as the lines had been cleared for the sake of fire-protection; whilst, on the survey of the boundaries of a proposed addition to the Charduár reserve, Rs. 9 only were spent on line-cutting.

Nowgong division

78. The survey work in the Nowgong division, on the other hand, has been considerable, and was much needed to enable the Conservator to submit to the Chief Commissioner his proposals regarding the forest which should be reserved in the Nowgong district.

79. The boundary surveys comprised the following proposed reserves:–

Addition to the Diju reserve ...	...	4·70	square miles.
The Suang reserve ...	...	3·00	"
The Bamuni " ...	...	0·74	"
Addition to the Deboka reserve...	...	44·52	"
The Rangkhang reserve ...	...	9·90	"
Second addition to the Kholahat reserve	...	23·39	"
The Sonai Kusi reserve ...	...	16·80	"

80. The expenditure on these surveys has been Rs. 2,329 during the year, or Rs. 22 per square mile.

81. This work was commenced by Mr. T. J. Campbell and completed by Babu Jogesvar Sur, and does credit to both these officers, as it had to be carried out partly in the rainy season to expedite the introduction of stricter conservancy of these forests.

Lakhimpur division

82. In the Lakhimpur division boundary lines, measuring 21 miles in length, are reported to have been surveyed in the Upper Dehing forest. The maps of these surveys have not yet been received from the Divisional Officer.

83. The expenditure on survey work in the Lakhimpur division has been Rs. 1,814 during the year, or Rs. 86 per linear mile, which is excessive, and the Divisional Officer has been called upon to explain the cause of this, as he had not done so in his annual report.

Working plans.

84. No working plans have been prepared for any of the forests in Assam up to date; but in January 1886 the Chief Commissioner sanctioned the formation of a Working Plans Division, and the native surveyors have since then been attached to this.

85. As already stated, the Dambu reserve has been carefully surveyed, which will form the basis for the working plan of this forest.

86. Until a party of the Imperial Forest Survey Branch applied for is deputed to this Province to carry out the surveys of the Sâl forests in Lower Assam, it will be the duty of the officer in charge of the Working Plans Division to conduct this work, as well as all other duties connected with working plans, and the collecting of statistical information about forests in general.

Annual plans of operations.

87. The annual plans of operations were, as usual, submitted by the Divisional Officers. Most of the works sanctioned by the Conservator were carried out, except where the retrenchments ordered by Government necessitated limiting the same.

CHAPTER III.

Protection and Improvement.

Establishments.

88. The permanent protective establishments remained the same as in the previous year, but further reductions were made in the temporary establishments, partly on account of the continued slackness of the export timber trade of Lower Assam, and partly on account of the retrenchments ordered by Government.

89. With one or two minor exceptions, the executive and protective charges of the different forest divisions remained the same as shown in Appendix V. of the Annual Report for 1883-84.

90. The sanction for three more officers for Assam, accorded in February 1885, has enabled the Chief Commissioner to appoint a Sub-Assistant-Conservator in charge of the Sylhet forest division, and to separate the forests in the Nowgong district from those of the Darrang district, and to make the former also into a separate forest division, which has much facilitated the efficient management of the forests in those districts.

91. In the Gáro Hills division, the protection as well as other forest work was rendered difficult on account of the unhealthiness of the forests in those hills, and the frequent illness of almost all employés from the Divisional Officer down to the forest guards. The year under report was the first in which a regular protective establishment was entertained in the Sylhet division. This work had in former years been done by the tahsildars of Protabgarh and Kanairghát, with three forest guards under them, whilst now there are two foresters and 15 forest guards employed under the Sub-Assistant-Conservator in charge of the division. This increase in establishment has so improved the revenue control that the receipts have been about double.

General protection against breaches of forest law.

92. The prosecutions for breaches of forest rules are shown in Statement No. 50, attached to this report. The total number of cases is 3 less than in 1884-85, but those disposed of during the year were 61, as compared with 54, and the number of persons was 181, as compared with 163 in the previous year.

93. Considered as a whole, breaches of the forest rules are very few in Assam, which is the natural consequence of the agricultural population receiving all kinds of forest produce, except reserved trees, free. The most of the prosecutions are still taking place in the Lakhimpur division, owing partly, no doubt, to the great temptation afforded to the people for smuggling, by the exemption from the payment of royalty of forest produce cut beyond the Inner Line.

94. As to the nature of the offences committed in the year, there is a decrease under every head.

95. The proportion of convictions to acquittals is as 2 to 1. This is much the same as in the previous year.

96. The appointment of special forest officers to Nowgong and Sylhet during the year, accounts in all probability for the stricter watching over forest interests, and the slight increase in the cases disposed of during the year in those districts.

97. There were only four cases of firing the forests; but, in considering this, it must always be remembered how extremely difficult it is to prove this offence. There is no doubt that a fire in the Rani reserve in the Kámrúp district originated with the carelessness of two villagers, who burned fields adjoining, but the evidence was not sufficient to prosecute them.

98. As in former years, there were no prosecutions on account of illegal grazing, simply because there is no necessity for resorting to the forests for this purpose, grazing ground being plentiful everywhere.

99. The number of forest offences compounded under Section 67 of the Forest Act was 79, for an aggregate amount of Rs. 2,308, as compared with 34 cases and Rs. 431 in the previous year. The settlement of forest cases in this way is much more satisfactory than resorting to courts of law. It is, as a rule, also much preferred by the people. The Conservator hopes that there will be fewer cases every year taken to the courts.

100. The following statement shows the number of persons, the number of cases, and the amounts for which they were compounded in the different divisions:—

Name of district.	Number of cases.	Number of persons.	Amount. Rs.	As.
Gáro Hills	21	27	755	12
Goálpára	2	19	560	0
Kámrúp	21	38	245	0
Darrang	3	3	37	8
Sibságar	13	14	502	12
Lakhimpur	2	2	5	0
Cachar	11	13	89	0
Sylhet	6	6	113	5
Total	79	122	2,308	5

Forest fires.

101. The season was again an exceptionally dry one, especially towards the close; but, in spite of this, fire protection has been very successful.

102. The tabular statement No. 51 attached to this report shows that the area which it was attempted to protect in the season under report was 149,821 acres, as compared with 134,224 acres in the previous season, and the area successfully protected was 145,180 acres, as compared with 127,091, whilst the expenditure came to Rs. 8,747 only, as compared with Rs. 10,302 in last season, which must be considered as very satisfactory, because already the previous year was a successful one.

103. The proportion of failures to area attempted in percentage, as compared with the two previous years, was as follows:—

	Proportion of failures to area attempted in percentage.		
	1883-84.	1884-85.	1885-86.
Goálpára division	64·32	2·51	·85
Kámrúp „	11·09	10·09	6·24
Darrang „	·16	1·69	.....
Nowgong „	·35	·17	3·08
Khási and Jaintia Hills division	·41	·63	.....

104. The above shows again a great improvement in both the Goálpára and Kámrúp divisions, which comprise by far the largest and most important forests protected against fire up to date in this Province, and much credit is due to Messrs. Copeland and Mein, the officers in charge of these divisions, for their personal exertions which brought about these favourable results.

105. In the Darrang division, in charge of Mr. Jellicoe, there has also been an improvement; and if the areas are not so large, the danger is nevertheless very great on account of the extensive grass lands and wastes which adjoin the forests.

106. In the Nowgong district the percentage of failures is larger, chiefly on account of the attempt made to protect the Sâl in the proposed addition to the Diju reserve, which was somewhat premature. After this forest has been made a reserve, and with a more thorough system of clearing fire-lines, the Conservator has no doubt that success will be attained here also.

107. Fire-protection in Assam is, to put it in a few words, a question of patient teaching of the people living in the neighbourhood of the forests, because they have from time immemorial resorted to burning them in a most reckless manner, of which bad habits they cannot be broken all at once. The advance made in this teaching of the people since fire-protection was first commenced cannot be considered otherwise than most satisfactory.

108. The increase in expenditure in the area attempted and that actually protected according to divisions, as compared with the previous year, is shown in the following statement :

	Increase in expenditure, as compared with previous year.	Increase in area attempted to be protected in acres.	Increase in area actually protected in acres.
	Rs.		
Goálpára division	307	.....	852
Kámrúp „	...	5,144	6,917
Darrang „	100	.....	.....
Nowgong „	...	10,773	10,291
Khási and Jaintia Hills division	...	.....	29
Total.....	407	15,917	18,089

109. The cost per acre successfully protected in the different divisions was as follows compared with the two previous years :—

	1883-84.		1884-85.		1885-86.	
	As.	P.	As.	P.	As.	P.
Goálpára division	3	6	1	2	1	2
Kámrúp „	0	11	1	3	0	9
Darrang „	0	3	0	3	0	4
Nowgong „	2	1	1	9	0	6
Khási and Jaintia Hills division ...	6	3	6	7	3	6

110. The area of reserved forests in the different divisions which requires no special measures to protect it against fire, because it does not burn, is the following :—

	Square miles.
In the Darrang division	265
„ Sibságar „	551
„ Cachar „	745
„ Khási and Jaintia Hills division	50
Total	1,611

Account of fireprotection according to divisions.

111. Further details regarding the important work of fire-protection according to divisions are given below.

Goalpára division

112. Fireprotection in the Goálpára division was carried out in the same forests that had been protected in the previous year, extending over 51,350 acres, and with an almost complete success, the area actually protected being 852 acres more than in 1884-85; whilst in the Guma reserve only about 15 acres were burned, and in the Sidli reserve 425 acres in the north-west corner of this forest. The latter fire was maliciously lighted by two men of Haltagaon village, who were caught, prosecuted, and convicted.

113. The measures adopted for fire-protection in the Goálpára division extended, as hitherto, to the Sidli, Guma, Panbari, and Pechadaveri forests, and were exactly the same as had been carried out in the previous years. Work was commenced early in October, and by the end of December all the external fire-lines, measuring about 76 miles, had been cut and once burnt to a width of 300 feet.

114. The Sidli and Guma forests were divided each into four blocks, and the Panbari Pechadaveri forests into two blocks. The lines dividing them measured about 11 miles, and were cleared to a width of 200 feet, which work was also completed by the end of December.

115. About 16½ miles of roads were, as in previous years, cleared, 100 feet on either side, and 7 miles of fire-lines of the same width were cleared around cultivation.

The compartment lines in the Sidli and Guma reserves were merely cleared as paths to facilitate communication.

116. Patrolling stations were established, with fire-guards at each, in the same way as in the previous year, 11 in the Sidli reserve, 7 in the Guma reserve, and 5 in the Panbari and Pechadaveri forests, and special guards were put in the Guma reserve, where this was set on fire two years ago, as it was suspected by Mr. Copeland that another attempt would be made by men instigated and living in the same village with a forester who had been dismissed from the department for misconduct some years previous. This precaution, it proved afterwards, was very necessary, as the attempt to burn the forest was made by eight men, who were caught, and the fire extinguished at once.

117. These men were prosecuted; but the Magistrate did not consider that there was actual proof of their having set fire to the forest, because they had not been seen lighting it, so they were only found guilty of trespass, and punished with one month's imprisonment each; but three were also found guilty of resisting their lawful arrests, for which they were sentenced to two months' imprisonment and a fine of Rs. 4 each as well.

118. The expenditure on fire-protection in the Goálpára division was for the Sidli reserve Rs. 1,980, for the Guma reserve Rs. 1,867, and for the Panbari and Pechadaveri proposed reserve Rs. 121. The proportion of these amounts that was expended on establishments, and such as was paid for the clearing of fire-lines, was the following:—

Particulars.	Sidli reserve.	Guma reserve.	Panbari and Pechadaveri reserve.
Cost of fire-conservancy establishments	602	381	.....
Clearing of fire-lines and building of huts	1,377	1,486	122
Total	1,979	1,867	122

This is only Rs. 40 per square mile in the Sidli reserve, as compared with Rs. 42 paid last year; but in the Guma reserve the cost per square mile has increased again from Rs. 59 to Rs. 74, as compared with the previous year. The necessity for this increased expenditure on the Guma forest as compared with Sidli, is explained by the Divisional Officer to be due to the fact that the Guma forest is on all sides surrounded by high grass lands, which have to be cleared, instead of its being partly, at least, adjoined by cultivated lands, as is the case in the Sidli forest.

The cost of fire-protectton in the Panbari Pechadaveri forest has only been Rs. 24 per square mile this year, as compared with Rs. 27 in 1884-85.

Kámrúp division.

119. In the Kámrúp division fire-protection has been extended. It comprised an area of 59,450 acres, as compared with 54,306 acres attempted in the previous year, out of which 3,710 acres were burned.

120. The different forests in which fire-protection was carried out, and other details are given in Statement No. 51 attached to this report.

121. The fires which occurred were all of small extent, except one in the Myang block of the Rani reserve, which took place on the 24th of March, and burned 3,000 acres. It spread from adjoining cultivation, where men had neglected to watch over the fires lighted close to the village of Ajhara, and the high wind blowing at the time carried it into the reserve. The villagers all ran away from their fields when they saw the forest had caught fire, and sufficient proof to prosecute the men concerned was afterwards not obtained, so that they escaped punishment.

122. The 200 acres in the Barduar and 60 acres in the Mataikhar reserves originated in fire being blown into these forests from those belonging to the Lower Assam Company, which latter were completely burned.

123. The fires in the Singra range occurred early in the season, and are reported to have therefore done little or no harm. For the same reason, and because it is considered impossible to protect the small Hajo forest otherwise, on account of the private forest adjoining it, which is always burned, the Divisional Officer proposes to burn the grass in this reserve very early in the season in future.

124. The total cost of fire-protection in the Kámrúp division for the season was Rs. 2,843, or Rs. 32 per mile, as compared with Rs. 3,860, or Rs. 50 per mile, in the previous year, which was divided between establishment charges and the cost of clearing fire-lines as follows:—

	1884-85.	1885-86.
	Rs.	Rs.
Cost of fire-conservancy establishments	968	800
Clearing of fire-lines, &c.	2,892	2,043
Total	3,860	2,843

125. The efforts made to encourage people to cultivate the grass lands adjoining the forests as an extra safeguard against fire have been as successful as in former years in the Kámrúp division. When cultivation has come up to the boundaries of the forests protected against fire, the dangers will be very much less, and the expenditure we now incur to prevent them will be small in proportion.

Darrang division

126. In the Darrang division the protection of the same area of reserved forests against fire, as in previous years, was attempted and successfully carried out, as a reference to Statement 51 will show. All clearing of fire-lines was completed by the beginning of December. The expenditure on the Balipára reserve has been Rs. 30 more than in the previous year, and in the Charduár reserve Rs. 31 have been spent more than in the previous year.

This increase of expenditure, it is explained by the Divisional Officer, is due to the lines of the Bálipára reserve having in the previous year been cleared first of all for survey work, and the expenditure been debited under that head; but the expenditure in 1883-84 was also much less, and further explanations have, therefore, been called for.

127. The proportion of the total cost of fire-protection in the Darrang division, paid for establishments and that expended on clearing the fire-lines, was as follows:—

Cost of fire conservancy establishment	Rs	91	0
Clearing of fire-lines	„	337	3
Total ...	„	428	3

This is about Rs. 15 per square mile actually protected, as compared with Rs. 11 spent in the previous year.

Nowgong division.

128. The area it was attempted to protect against fire in the Nowgong division has been 15,901 acres, as compared with 5,128 acres in the previous year. To have attempted this large increase without more and better men than were available, was somewhat hazardous. The area actually protected has been more than four times that of the previous year, at a reduced expenditure, which does credit to Babu Jogesvar Sur. Protective measures in the way of clearing fire-lines were commenced in October, but not entirely completed until the middle of February, as some of the fire-lines are in low and wet places, where the grass could not be burned earlier.

129. The total length of external fire-lines cleared to a width of 300 feet was 21 miles, in addition to which 4 miles of block-lines, 200 feet wide, and 1 mile of road, 100 feet on either side, were cleared.

130. The expenditure on fire-protection in the Nowgong division during the season has been Rs. 503. This is Rs. 21, as compared with Rs. 71 per square mile in the previous year, and a very very satisfactory result.

Khási and Jaintia Hills division.

131. Fire-protection in the Khási and Jaintia Hills division extended to the same areas as in former years, and was a complete success. The high cost of this work was brought to the notice of the Deputy-Commissioner, and the employment of free labour in preference to prison labour urged. The cost in the year under report has been only Rs 1,005, as compared with Rs. 1,883 in the previous year.

Out of the total expenditure, as stated above, the establishment charges came to Rs. 645, and the clearing of fire-lines to Rs. 360.

Natural reproduction.

132. The natural reproduction in the Sâl forests of Assam continues to be everything that could be desired, particularly in those forests which are protected against fire; where the latter is not the case, the natural reproduction is often interfered with. On these grounds it would be most desirable that fire-protection should be extended, which question is one of financial consideration. If the extent of forest work is to be limited according to income, Assam labours under a twofold disadvantage, inasmuch as all works are expensive, because labour is scarce, and its cost very high, whilst, on the other hand, the income from forest resources is as yet comparatively small, because the trade of the country generally is not much developed. Our forest work is, therefore, more than in any other province, done with a view to secure advantages in the future. However, even without the aid of fire-protection, the regeneration in Sâl forests, as a whole, is very good, and the maintenance of the forests not in danger, since the felling of trees is restricted to such as are over 4½ feet in girth.

133. In the mixed evergreen forests natural regeneration is also perfectly insured, by not allowing immature trees to be felled. The areas are fully stocked, except where *jhumed* in former times, the only exception being some of the forests in the Sylhet district, which have lately been declared protected forests. These have come down to, and are being worked more or less as coppice, to supply firewood for the dense population in that district. Here efforts will be made to let standards grow up for the purpose of shedding seed, since the system of coppicing can only be stopped very gradually, otherwise great inconvenience would be caused to the inhabitants, as regards procuring their firewood at reasonable cost.

Artificial reproduction.

134. The plantation work done during the year has been much restricted, owing to the retrenchment ordered by Government, as this and the purchase of elephants are the only two items of expenditure in which retrenchments can be made without causing actual retrogression in forest work in Assam.

135. The Statement No. 52 attached to this report shows an extension of 36 acres, the expenditure on which, however, was partly incurred in the previous year, for preparing the ground, so that the effect of the retrenchments made this year will be even more apparent next year, as but very little could be done in the way of preparing additional areas for planting for the want of funds.

Account of plantation work according to divisions.

136. A detail account of the plantation work done in the different divisions is given below:—

Gáro Hills division.

137. The attempt to grow *Cinchona succirubra* at Tura in the Gáro Hills, made by the special wish of the Chief Commissioner, is more or less a failure, since the elevation is not high enough for Cinchona. The plants which are still alive are sickly, and will not grow into vigorous trees. The species tried is the one which thrives at a lower elevation than all the others, so there is no hope of other kinds doing better. It will not be advisable to spend more money on these experiments, since there can be no doubt that the extensive Cinchona plantations in the Darjeeling Hills will supply bark cheaper now than this could be done from Assam.

The expenditure during the year on this experiment has been Rs. 117.

Kámrúp division.

138. The attempt made at the Kulsi plantation in the Kámrúp division to grow Cinchona has not succeeded much better than at Tura, and, beyond trying to make the trees there are now grow, nothing more will be attempted in Cinchona cultivation. Out of a total number of 578 plants put out, there are now only 310 alive. The expenditure on this work during the year in this division has been Rs. 121-2-3.

139. The growth of the Rubber-trees at the Kulsi plantation during the year has been most satisfactory, and the condition of the trees generally is very promising. All the lines of Rubber-trees have been interplanted either with bamboos or the most valuable kinds of timber trees, growing in mixed forests, so as to derive the full benefit from the area under cultivation.

The expenditure during the year in the Kámrúp division on Rubber plantations has been Rs. 1,010, which is high; but the principal portion was on account of fencing, which will last several years, and was necessary to protect the young Poma (*Cedrela Tuna*) trees planted between the lines of Rubber-trees. There is no necessity for reconstructing the fence hereafter.

140. In the Teak plantations little more than clearing of undergrowth and cutting of climbers had to be done, as they are fully stocked, and even the youngest of the trees are nearly old enough for them not to be affected any longer by undergrowth. The total expenditure on Teak plantations during the year was Rs. 271.

141. In the Sisu plantation the sowing of Ajhar (*Lagerstrœmia Reginæ*) made last year have turned out a great success. The exceptionally high grass and reeds had to be kept down; but the Divisional Officer expects that the latter will soon be overtopped by the young Ajhar-trees. The expenditure during the year on this plantation has been Rs. 136.

142. The Ceara Rubber-trees continue to grow vigorously and healthy, but some have also died, whilst more young trees have been raised from seed. As a rubber-yielding tree, it can, as far as one is able to judge at present, not in any way be compared to the indigenous Rubber-trees (*Ficus elastica*). The Ceara Rubber-trees continue to be much damaged by the storms, if they are in the least exposed to the wind.

The Mahogany-trees are reported to be all dead or dying, as was expected from the commencement.

The *Pithecolobium*-trees are growing as well as before; some of them have flowered for the first time. They were planted in 1881.

The growth of the Phillipine plantains (*Musa textilis*) continues to be unsatisfactory. No doubt the climate of Assam is too cold for this plant.

The experimental planting of the Paper Mulberry (*Broussonetia papyrifera*) has fulfilled its purpose. There is no doubt that this plant will grow well in Assam. No further expenditure will, therefore, be incurred on this experiment, except what is quite indispensable, and no extensions will be made hereafter.

The Maipak-trees (*Evodia meliæfolia*) continue to grow well. They were sown in 1881, transplanted in 1882, and measure now 40 feet in height by about 13 inches in girth. They flowered and bore seed for the first time this year.

143. The expenditure on nursery work during the year, including the Cinchona plants, was Rs. 412. Bamboo-planting cost Rs. 16. This brings up the total plantation expenditure to Rs. 1,845.

144. A plantation memorandum, drawn up by Mr. Mein, the Divisional Officer (Appendix III. of this report), gives the measurements of trees, the expenditure incurred on the different works, and the rainfall at the Kulsi plantation during the year under report.

Darrang division.

145. The chief Rubber plantation in the Province is in the Charduár of the Darrang district. It has been extended during the year by 31 acres, the preparing of which area was already paid for in the previous year. As above explained, all new work had to be stopped in the Charduar plantation on account of the retrenchments ordered by Government.

146. The keeping up of the old plantation was attended to as usual, and the trees are growing vigorously as heretofore.

147. The only real danger for the young Rubber-trees which remains is wild elephants. They destroyed or injured not less than 303, in spite of special guards being kept to watch day and night over the plantation. The cost of these guards during the year came to Rs. 535. The deer have done little or no harm to the trees, as most of the latter have grown far beyond their reach, and the smaller ones are securely tied to strong stakes, fencing having been entirely given up.

148. The plantation memorandum, drawn up by Mr. Jellicoe, the Divisional Officer (Appendix IV. of this report), shows the measurements of trees, the expenditure incurred on the different works, and the rainfall during the year.

149. The trees of the year's extension have not been shown in the plantation memorandum, as they have not as yet established themselves properly in the ground.

150. The small Rubber-plants placed in the forks of trees continue to make but very slow growth. This method cannot be recommended, as it will take ten years before the plants, or rather such as do not die, will become established, which in itself shows that it is not practical, since it would add the cost of ten years' supervision without any corresponding advantage whatever.

151. Since there is a great abundance of young trees ready for planting out on extensions, no more were raised from seed during the year.

152. The timber trees, such as Poma, Nahor, Amari, Sam, and Ajhar, interplanted in the lines of Rubber-trees, have done well; but the Gunserai-trees, sown in compartment No. 4, were a failure.

153. The rainfall during the year at the Charduár plantation was 100·61 inches, which is fairly good for the cultivation of Rubber-trees.

154. The protective measures carried out last year against encroachments by the Mansiri river were successful. Rs. 13-8 were again spent for this purpose.

155. The total expenditure on the Charduár plantation during the year under report was Rs. 4,004, as compared with Rs. 4,722 in the previous year. The different kinds of work on which this amount was spent are shown in Appendix IV. of this report.

156. In the small experimental Rubber plantation on the Bamoni Hill near Tezpur the growth of the trees is also very good.

The expenditure on this plantation was Rs. 10 only.

Sibságar division

157. In the Nambor forest, also, but very little planting could be done for want of funds. The area added was 5 acres only, and consisted of Ajhar (*Lagerstrœmia Reginæ*). The general growth of the trees sown or planted in former years is reported as very good, and in the places first planted nothing further than protection is now required.

The Maipak (*Evodia meliæfolia*) sown last year germinated well after three months, and the growth of the young trees has been excellent.

The total expenditure on plantation work in the Nambor forest during the year was Rs. 301. Labour in this forest continues to be very scarce and difficult to procure.

Lakhimpur division

158. On the two acres of Teak trees planted in 1869 at Makum, in the Lakhimpur district, some of the trees continue to grow fairly well, whilst others are more or less sickly. Upper Assam is too wet and cold for the Teak-tree. No expenditure was incurred on account of these trees.

159. The sowing and planting in the Khási Hills were all done in the immediate neighbourhood of Shillong, and consisted exclusively of the indigenous Oaks, planted on blanks in the forests. They grow easily, but their growth is very slow, and whilst the plants are young, they are very liable to be bitten off by rats, which are in some years a terrible pest in these hills.

Khási and Jaintia Hills division.

The expenditure on plantation work during the year in this division has been Rs. 523.

160. The improvement of forests by the sowing and planting of areas allowed to be *jhúmed* for that purpose, or by the "Taungya system" as it is called in Burma, has been enquired about in different districts in accordance with the suggestion made in the Government of India review of the last Assam Forest Report.

Sowing and planting on *jhúmed* lands.

161. As was to be expected at the commencement, people have expressed in most instances an aversion to place themselves under obligation or restrictions in carrying on their *jhúming*, but this is only a question of time and of the greater or less extent of land available or allowed to be *jhúmed*. In fact, in the Lakhimpur district people have been objecting to sow or plant timber trees because they would not be allowed to *jhúm* again these lands planted out, after seven or ten years, if they did so. This shows the simplicity of the people we have to deal with. They have as yet not recognized the extreme waste there is in *jhúming* as compared with permanent cultivation, and that Government has a perfect right to check such waste, or that they themselves are but a handful of men, as compared with the rest of the population, and that their mode of cultivation is equivalent to requiring seven or ten times as much land as people who carry on permanent cultivation, whilst, at the same time, they only pay a poll-tax, or in other words, a mere nominal sum, as compared with the ordinary land tax fixed by Government.

162. Under these circumstances, it will require some persuasion to induce the people to plant timber-trees on their *jhúms*. As far as the enquiry has gone, the chief difference at issue between those people who have not altogether refused and the forest officers is, whether the timber-trees are to be sown in the first year of the *jhúm* or in the last, just before they abandon it, which is of very great moment from a forest point of view, as the young timber-trees would not have the same chance of growing in an abandoned *jhúm* as in a newly-cleared one, not to say anything of the extra expense it would be to keep the young trees clear for two years longer.

163. The payment of Re. 1 per hundred plants was also laughed at, and Rs. 5 demanded instead. This is Assam all over, but the Conservator has no doubt that the system can be successfully introduced within a year or two, and that much good can be done by it. In fact, Mr. Mein in the Kámrúp district has already succeeded to induce the people to sow 80 acres of their *jhúms* with Poma (*Cedrela Tuna*); but this is on fields they are about to give up, and they have not agreed to keep the young trees clear hereafter.

164. The only forests in which climbers interfere much with the cylindrical growth of the boles of trees are the Sâl forests. Cutting of climbers was, therefore, only carried out in some of the latter, in the Goálpára and Kámrúp divisions, where most necessary. In the former division about 2,000 acres were cleared in the Guma reserve at a cost of Rs. 171, and 900 acres in the Pechadaveri forest at a cost of Rs. 22.

Cutting of climbers.

165. In the Kámrúp division, about 150 acres were cleared of climbers in the Pantan reserve, and about the same area in the Khurkhuri reserve, besides the Kulsi plantation.

The total expenditure on this work in the Kámrúp division came to about Rs. 136 in the year.

166. Road work has, in the year under report, been again pushed on in the Gáro Hills, so as to make the Dambu forest accessible. This cart-road was completed up to and into that forest, and since the close of the year the Chief Commissioner has consented to its being taken over by the Public Works Department.

Communications and buildings.

167. This Dambu cart-road was the chief work done in the way of road-making by the department, as it was urgently needed for the working of that forest, because it consists to a great extent of over mature trees. It has necessitated restricting temporarily road work in other divisions; but that was justifiable, as the same necessity did not exist elsewhere.

168. The total expenditure on road work during the year was Rs. 18,837 as compared with Rs. 12,953 in the previous year, and Rs. 16,866 out of that amount were spent in the Gáro Hills.

169. Building work carried out by this department has been somewhat less, since some of this work was, in accordance with the Government of India orders, transferred to

the Department Public Works, and, no doubt, is much more in the way of an engineer's than a forester's work. At the same time, much has been done in this way by providing smaller inspection huts in the forests for the use of officers and the higher subordinates, and similarly huts have been provided or kept in repair to afford shelter to forest guards. Both these items are particularly necessary in Assam, since illness in this trying climate not unfrequently originates in exposure which could have been avoided.

170. The total expenditure during the year on account of buildings was Rs. 9,053 as compared with Rs. 10,873 in the previous year.

Account of road work and buildings according to divisions.

171. A brief account of road work and buildings according to divisions is given below.

Gáro Hills division.

172. Nearly the whole expenditure on road work in the Gáro Hills division was for the Dambu cart-road, the total length of which is about 24 miles; and, everything included, it has cost about Rs. 1,000 per mile. This work was carried out under great difficulties, the chief of which were scarcity of labour and the difficulty to keep it, after it had been procured, owing to the unhealthiness of the locality. It opens out for cart traffic, besides the Dambu forest, one of the richest parts of the Gáro Hills, which had been almost inaccessible before. The work does credit to the officers who were connected with its construction.

173. The building of the Tura bungalow was completed during the year, besides which there has been a godown built also at Tura, and a good inspection hut at Damra, and huts to provide shelter for all grades of subordinates in the different parts of the hills.

174. The total expenditure on buildings in the Gáro Hills division during the year was Rs. 3,799. All buildings are reported by the Divisional Officer to be in good repair.

Goálpára division

175. No road work was attempted, neither is it required in the Goálpára division. The total expenditure on buildings during the year was Rs. 559 as compared with Rs. 992 in 1884-85. Out of this amount, Rs. 530 was paid for repairs and Rs. 29 on original work. The forest bungalow and forest office at Dhubri were, at the close of the year, transferred to the Public Works Department.

Kámrúp division.

176. All existing forest roads and paths in the Kámrúp division were cleared and repaired where necessary, and the district roads near the reserves were again placed under the supervision of the Forest Officer. All roads were, at the close of the year, in good order. The total expenditure during the year on roads in the Kámrúp division was Rs. 552, the chief portion of which was for bridge work.

177. The building done in the Kámrúp division consisted of the usual repairs necessary every year, and the construction of a rest-house and range office combined at Jonga Khuli, the head-quarters of the Singra range.

The chief repairs were those of the Divisional Officer's bungalow and office at Gauháti, the bungalow at the Kulsi plantation, and the rest-houses at Ukiam, Rajapara and Borbokra.

The total expenditure on buildings in the Kámrúp division during the year came to Rs. 1,270.

Darrang division.

178. The road work in the Darrang division consisted of repairs only. The chief work was the repairing of the road leading up to Bhalukpung at the foot of the Aka Hills. It took nearly half the funds, allotted in the year under report for the Darrang division, to do this work. The roads in the northern part of the Darrang district, and particularly in the vicinity of the Charduár and Bálipára reserves, are much exposed to damage by the floods which occur once or twice every year when the rainfall in the mountains just north of the district is exceptionally heavy.

The total cost of road work in the Darrang division during the year was Rs. 496.

179. The forest buildings which are kept up in the Darrang division are not expensive. They consist almost entirely of small inspection huts and rest-houses and huts for workmen. They were all kept in proper repair. At Behali range office and quarters for the officer in charge of the eastern range were built.

The total expenditure on buildings during the year was Rs. 181.

Nowgong division.

180. No road work was done, or is required, in the forests of the Nowgong division, existing paths being sufficient for the present; and as regards buildings, these are only small inspection huts and huts for subordinates in the forests. One new inspection hut was built at Chapanulla. All other expenditure was on account of repairs. The total cost of building work in the Nowgong division during the year was Rs. 242.

181. In the Sibságar division there are nearly 100 miles of forest roads and paths to be kept up; but this work is inexpensive, as the greater part of them lies in dense forest, where they keep fairly clear all the year round. Part of the Mikir Hills bridle-path was found so useful to the Nágas who had settled in the neighbourhood of the Mikir Hills reserve, that they kept it clear without payment. All roads and paths were kept in good condition during the year at an expenditure of Rs. 270.

Sibságar division.

182. The buildings in the Sibságar division are also inexpensive to keep up, a new inspection hut was commenced at Kasomari, but not completed during the year. All other buildings were kept in proper repair. The Divisional Officer's bungalow and office at Sibságar were made over to the Department Public Works at the close of the year.

The expenditure on buildings during the year in the Sibságar division was Rs. 213.

183. Road work by the Forest Department in the Lakhimpur division is very limited, consisting of about four miles only, connecting the Dehingmukh forest with the Trunk Road. This was kept open at a cost of Rs. 60 during the year, which, however, has erroneously been classified by the Divisional Officer as demarcation work. All other forests are fairly accessible by district roads and village paths.

Lakhimpur division.

184. The buildings to be kept up by the Forest Department in the Lakhimpur division consist of five inspection huts and the huts for subordinates at 15 patrol stations, which were either built or kept in repair at a cost of Rs. 404 during the year. Rs. 50 were spent on repairs of the Forest bungalow before it was transferred to the Department Public Works at the close of the year.

In addition to this outstanding advances for building work done in the previous year to the amount of Rs. 551 were adjusted in the year under report.

185. The chief work in the Cachar division was the further construction of the road through the Katakhal reserve from Loharbund to Borun Cherra, the progress on which has, from various causes, not been satisfactory.

Cachar division.

The expenditure on the Katakhal road during the year has been Rs. 514 in the Upper Jiri and Barak reserve, and on other petty works Rs. 138-4 were spent.

186. Building work in the Cachar division was restricted to repairs only. The expenditure of Rs. 1,429, shown in the summary, consisted partly of the adjustment of advances made on account of building work done in the previous year.

Sylhet division.

187. No road work was done by the Forest Department in the Sylhet division, since those forests are fairly accessible by existing paths.

188. The building work done consisted of the construction of an office house and two out-houses at Silooah, a cook-shed at Patharkandi, and six huts in other parts of the district for the subordinates of the Department, at a total expenditure during the year of Rs. 259.

CHAPTER IV.

Yield and Working.

189. Timber operations by direct departmental agency were limited to the requirements by the department, except the sawing up of 12 trees felled by, and taken over from, the contractors, who had undertaken to work the Dambu forest, but failed.

Departmental operations.

The trees felled by the department during the year came to 18. They were used for buildings and bridges, and are shown in the Tabular Statement No. 53 attached to this report.

No timber was worked out for other public departments during the year.

190. Appendix V. of this report shows the results of the experimental tapping of Rubber-trees in the Darrang division, carried on under the personal supervision of Mr. J. T. Jellicoe, the Divisional Officer. Of the first 50 trees, another one was blown down during the year (No. 43). It was still green at the time of the experiment, and, when tapped yielded 1 seer 12 chhataks of rubber.

Experimental tapping of Rubber-trees.

191. Of the six trees, Nos. 51 to 56, tapped last year for the first time, only two were tapped in the year under report, the other four being left untouched to recover the effects of last year's tapping. The average yield per tree in rubber

and in money, as compared with the results of former years, is given below:—

	1882-83. Average yield per tree in rubber.		1883-84. Average yield per tree in rubber.		1884-85. Average yield per tree in rubber.		1885-86. Average yield per tree in rubber.	
	Srs. Ch.	Rs. A. P.	Srs. Ch.	Rs. A. P.	Srs. Ch.	Rs. A. P.	Srs. Ch.	Rs. A. P.
Trees Nos. 1 to 50...	4 4	8 10 10	1 1	0 13 9	2 5	3 9 0	3 4	6 11 8
" " 51 " 56...	.....	.....	.....	.....	12 10	17 10 5	.....	.....
" " 51 & 52...	.....	.....	.....	.....	.....	.....	5 13	12 0 6

192. The marked difference between the yield of the trees in the Sonai Hills (No. 1 to No. 11) and that from the trees in the Koliajuli Hills (No. 12 to No. 52) is attributed by the Divisional Officer to the former being younger.

193. The gross revenue realised on the rubber obtained by this experimental tapping in the year under report was Rs. 340-13-9, and the net revenue came to Rs. 157-10.

194. The cost of the tapping has been Rs. 161-4, as compared with Rs. 60-10 in the previous year, or almost three times as much. This heavy increase in the cost of the tapping and collecting is said by the Divisional Officer to be due to the high wages he had to pay to the Assamese for the collecting of loaf rubber; the ball rubber, chiefly obtained from the upper branches, was collected by Nepalese coolies at a contract rate of Rs. 25 per maund.

195. Making an allowance for the four trees, Nos. 53 to 56, which were not tapped during the year, and yielded the year previous 11 seers and 8 chhataks, and the short yield by one seer of the tree No. 43 blown down, the net yield of dried rubber in the year under report was 4 maunds 4 seers 10 chhataks, as compared with 4 maunds 25 seers 14½ chhataks in the previous year, and the net revenue was Rs. 157-10, as compared with Rs. 137-7-7 the year before.

Removal of produce by consumers and purchasers.

196. The total outturn of timber, firewood, and other minor forest produce, removed by purchasers during the year under report, is shown in the tabular statements Nos. 54 and 55 attached to this report.

Changes in forest rules.

197. The following changes in forest rules were sanctioned during the year by the Chief Commissioner:—

The Assam District Forest Rules were extended to all forests situated within the plains of the Nága Hills district.

The control over forest produce in transit was extended to the Surma and Kushiara rivers and their tributaries under the Sylhet River Rules.

The inhabitants of the Jaintia Hills were exempted from the payment of royalty on forest produce, other than timber, removed by them for sale from the Jaintia Hills district forests.

Working of the permit system.

198. The permit system of working the forests in Assam was described in full detail in paragraphs 168 to 177 of last year's report. The number of each kind of permit, and the fees realised on them, as compared with the previous year, are shown in Appendix VI.

199. The forest produce removed on the home consumption permits and its value are shown in the columns of free grants in the Tabular Statements Nos. 54 and 55.

Account of timber and other forest produce removed

200. The total outturn of the forests in Assam is shown in these same statements, and, to facilitate a ready comparison with that of the previous year, the usual tabular statements, as ordered by the Chief Commissioner, have been prepared, and are attached to this report as Appendices Nos. VII. and VIII.

201. The following abstract statement will show at a glance the yield of timber and other wood in the valley districts, the Gáro, Khási, and Nága Hills, in cubic feet, as compared with that of 1884-85:—

	1884-85.				1885-86.			
	Sâl.	First-class.	Second-class.	Total.	Sâl.	First-class.	Second-class.	Total.
From reserved forests.....	80,280	13,800	44,040	138,120	63,855	13,707	26,386	103,948
" protected and district forests	26,910	53,370	92,490	172,770	35,467	173,353	413,792	622,612
Total.....	107,190	67,170	136,530	310,890	99,322	187,060	440,178	726,560

202. The estimated solid cubic contents of boats, poles, and dead wood yielded by the forests in the same part of the Province, as compared with the previous year, were as follows:—

	1884-85.				1885-86.			
	Poles.	Boats.	Dead wood.	Total.	Poles.	Boats.	Dead wood.	Total.
From reserved forests.....	22,800	325	69,750	92,875	21,598	360	75,875	97,833
„ protected and district forests.	12,740	26,775	68,460	107,975	27,270	33,540	29,236	90,046
Total...	35,540	27,100	138,210	200,850	48,868	33,900	105,111	187,879

203. The logs, posts, planks, and firewood yielded by the Government forests in Cachar and Sylhet, and such as were removed from private or imported from foreign forests by purchasers, as compared with the previous year, were as follows:—

	1884-85.				1885-86.			
	Logs.	Posts and planks.	Fire-wood.	Total.	Logs.	Posts and planks.	Fire-wood.	Total.
From Goverment forests...	254,559	2,491	9,710	266,760	267,766	5,401	75,297	348,464
„ foreign „	25,922	...	50	25,972	54,417	96	6,872	61,385
„ private „	268,491	1,775	31,896	302,162	207,680	2,201	77,135	287,016
Total	548,972	4,266	41,656	594,894	529,863	7,698	159,304	696,865

204. It will thus be seen that the yield of Sâl has been less than in 1884-85, which is due to the continued slackness of the export timber trade in Lower Assam, aggravated, however, also by the claims made in the Goálpára district by the zamindars for *thaljhat* on timber stacked by the *daffadars* or purchasers in the Government timber depôts, which claims were admitted by the court, and had to be paid by these men, although for six years they had been stacking their timber unmolested in these depôts, and Government was not allowed to be made a party in these suits.

It is natural, therefore, with the prices for timber very low, and this extra tax imposed on it, that timber purchasers did not care to do timber work in the year.

Under the above circumstances, fresh lands have now been acquired by Government under Act X. of 1870 (the Land Acquisition Act) for the *daffadars* to stack their timber on, without risk of being subjected again to this treatment.

205. Another cause of the short yield of Sâl has been the breakdown of the contractors who obtained the lease of the Dambu forest in the middle of the working season, when it was too late for the department to start work by direct agency.

206. The yield of other first-class and second-class timber from the Government forests not depending on the export trade has, on the other hand, increased, as shown in the above abstract statement.

207. In the Sylhet and Cachar divisions the figures given in the above abstract statement include all produce which had reached the revenue stations by the 31st of March, although the revenue will only be realised when it is sold, and therefore appear in the accounts of 1886-87. The yield has been more, both from Government and foreign forests, whilst the removal from private forests has decreased as for some years past. The above increase is chiefly due to the Sylhet division, where great efforts have been made to open out the forests.

208. The increase in the import of foreign timber into Cachar is due to the energetic manner in which the Mahárája of Manipur has pushed on his timber trade. The import of foreign timber into the Sylhet district has been recorded this year for the first time. No duty is collected on this for the present.

209. The decrease in the removal of timber from private forests is due to these forests having been partly exhausted, and also to the fact that owners have restricted sales, as they recognise now the imprudence of having overworked their forests formerly.

Sale of trees on land allotted for cultivation.

210. The following statement shows the area of forest land allotted for cultivation and the forest revenue realised and due on the timber and other forest produce on such lands:—

Name of division.	Area of forest land allotted for cultivation in acres.				Amount of forest revenue realised and due.				Average amount per acre.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
					Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Kámrúp	461	...	...	461	979	...	...	979	2 2 0	.....	.....	.....
Darrang	2,524	2,467	...	57	6,526	7,453	927	...	2 9 4	3 0 4	0 7 0	.....
Nowgong.....	...	3	3	...	...	9	9	...	.....	3 0 0	3 0 0	.....
Sibságar	1,165	1,388	223	...	2,910	8,892	5,982	...	2 8 0	6 6 6	3 14 6	.....
Lakhimpur	37	655	618	...	89	1,726	1,637	...	2 6 6	2 10 1	0 3 7	.....
Cachar	442	2,711	2,269	...	797	6,001	5,204	...	1 12 10	2 3 5	0 6 7	.....
Sylhet	5,183	1,460	...	3,723	1,330	514	...	816	0 4 1	0 5 7	0 1 6	.....
Total	9,812	8,684	3,113	4,241	12,631	24,595	13,759	1,795	1 4 7	2 13 3	1 8 8	.....

Caoutchouc or rubber trade

211. The caoutchouc yielded by the Assam forests has been ascertained, as was done in former years, by deducting the imports from the exports, thus giving 5,675 maunds, as compared with 7,290 maunds yielded in 1884-85.

This is the second year that there has been a decrease in the yield of rubber; and although it is still more than in 1882-83, it shows less activity in the rubber trade, which not unlikely is brought about by the fact of the trees requiring rest to get over the effects of the severe tappings they have had in the last two years.

212. The value of the rubber-*mahâls* in the different districts in the year was as follows:—

	Rs
Darrang	22,100
Nowgong	128
Lakhimpur	7,600
Cachar	1,000
Khási Hills...	350
Total	31,178

This is Rs. 1,668 more than in the previous year.

Account of produce removed by purchasers according to division.

Gáro Hills division.

213. In the Gáro Hills division, the working of the Dambu forest was leased to contractors, who had agreed to work out not less than 1,000 Sâl-trees per annum; but they failed, and had done but very little up to the time they stopped work. The reason of their breakdown was that they had worked with borrowed capital, and failed to procure more funds at the time they were most in need of them. Only 23 trees were worked out by them.

214. The number of trees sold standing in other forests in the Gáro Hills division to purchasers was 733, as compared with 469 in the previous year. The decrease in Sâl-trees is due, as already stated, to the continued depression in the export trade. The increase in the removal of other trees is satisfactory, but still plainly shows the dull state of the timber market, as many more could have been sold from the forests. There was also a slight increase in the sale of dead wood and dugouts.

The yield of the shared zemindari forests has fallen from 225 to 199 trees.

215. The removal of forest produce on *garkati* permits is peculiar to the Gáro Hills. They are always granted for the financial year for the removal of inferior wood and other minor produce required by the inhabitants of the plains immediately adjoining the Gáro Hills, and paid for by the Gáros at the rate of 6 annas each, and by outsiders at the rate of Rs. 2 each. They are sold on behalf of Government by respectable people, such as shopkeepers and others who live in convenient places, as well as by forest guards, all of whom receive 10 per cent. commission on their collections.

216. The following statement shows the satisfactory increase in the sale of the *garkati* permits, which is partly due to stricter supervision exercised during the year:—

	1882-83.	1883-84.	1884-85.	1885-86.
Gáro permits	2,358	2,300	1,730	2,282
Foreign	1,223	2,210	2,770	3,870
Total.....	3,581	4,510	4,500	6,152
In Government forests ...	3,043	4,029	3,925	5,284
„ shared forests.....	538	481	575	868
Total.....	3,581	4,510	4,500	6,152

The *garkati* permits sold in 1884-85, but not shown in last year's report, because the royalty was not received until after the close of the financial year, have been added in the above abstract statement under 1884-85 and not for 1885-86, they were 1,039 altogether.

Goálpára division.

217. In the Goálpára division there has been a falling off in the yield of the forests, owing, as already stated, partly to the dull state of the export timber trade, and partly to the claims for *thaljat* made by the zamindars. An effort was made to induce the *daffadars* to do more work by demanding only one-fourth of the royalty before the trees were cut, and the other three-fourths after the sale of the timber; but even this failed. The number of trees sold was 731, as compared with 1,361 sold in the previous year.

218. At the Dhubri check station Rs. 297 were collected on forest produce not marked, or unprovided with a certificate or pass.

Kámrúp division.

219. In the Kámrúp division there has also been a falling off in the sale of trees from 2,641 in 1884-85 to 1,542 in the year under report. Of the latter, 852 were converted into logs and 690 into dugouts or boats, and the Department Public Works took 94 trees out of the 852.

In addition to these trees, there were 9,093 pieces of dead wood, nearly all Sâl, worked out by purchasers from the Kámrúp forests during the year.

Darrang division.

220. The number of trees sold in the Darrang division was 967, as compared with 1,883 sold in the previous year. Charcoal has also been less, which is the natural consequence of the introduction of drying machines for tea-making. The sale of bamboos and cane has been more than in 1884-85.

There are still considerable areas of forest remaining on private estates, which more or less prevents a material increase in the demand for forest produce from Government forests.

Nowgong division.

221. In the Nowgong division the yield in timber in the year has been 488 trees, as compared with 529 trees in the previous year. Posts and pieces, chiefly obtained from *jhúmed* lands, on the other hand, have increased from 31 to 1,211, and bamboos from 1,278 to 34,682, whilst the yield of cane increased from 12,015 to 29,216 bundles.

Sibságar division.

222. In the Sibságar division the yield of timber increased from 1,581 trees in the previous year to 2,221 in the year under report, and 108 boats paid royalty, as compared with 115 in the previous year.

In dead wood, charcoal, poles, and canes there has also been an increase, whilst in bamboos there was a decrease.

Lakhimpur division.

223. In the Lakhimpur division the number of trees sold was 2,022, as compared with 1,889 sold in the previous year. This includes 59 trees sold for dugouts and 547 trees felled by the Assam Railways and Trading Company, on which they have not paid the royalty during the year, because they had petitioned Government, claiming exemption from payment, which has, however, been refused since the close of the year.

224. The difficulties of preventing smuggling, alluded to in last year's report, paragraph 212, still continue. Proposals to sell a cane *máhál* in the North Lakhimpur sub-division have been under the consideration of the Chief Commissioner, and were sanctioned since the close of the year, as it was found next to impossible to prevent smuggling, with the very limited forest establishments, of a produce so very portable and so easily to be concealed.

225. In the year under report the yield of cane in this division increased to 318,110 bundles, as compared with 91,350 in the previous year, and the revenue was Rs. 3,090 as compared with Rs. 854.

226. As regards rubber, the Lakhimpur division is the most important, next to Darrang. Its value in the year under report was Rs. 7,600, as already stated in paragraph 212 of this report.

Cachar division.

227. The number of logs brought out of the Cachar forest has been less. It was 6,126, as compared with 7,047 in the previous year. Posts and planks have also decreased, but bamboos and cane increased. The remainder of the forest produce is of minor importance. Full details will be found in Appendices VII. and IX. about all descriptions.

228. The Divisional Officer can assign no reasons for the decrease, and considers it accidental. The timber-cutters have obtained most of their logs from the Inner Line reserve this year, because large trees are to be had there in more accessible places.

229. The following figures will show to what extent the consumption of the different classes of timber has decreased, as compared with the previous year :—

	1884-85. C. ft.	1885-86. C. ft.
First-class timber	34, 140	28,364
Second " "	19,557	19,358
Third " "	194,896	169,923
Total	248,593	217,645

230. The number of logs exported from Cachar came from Government and foreign or from private forests in the following proportion :—

	1882-83.	1883-84.	1884-85.	1885-86.
From Government and foreign forests	1,184	3,268	3,503	2,631
From private forests	11,281	14,208	8,361	4,011
Total	12,465	17,476	11,864	6,642

This and the further details given in Appendix IX. show that out of the total yield of 14,527 logs, 7,885 logs remained in the Cachar district. Out of the 30,819 maunds of firewood, only 542 maunds were exported.

231. The yield of the North Cachar Hills, as registered at Diyangmukh, continues to be small. The exact quantities are given in Appendix IX.

Sylhet division.

232. The timber removed from the forests in the Sylhet division has been 49,948, as compared with 20,422 cubic feet in the previous year, or more than double. This is, however, not altogether an increase, but has rather to be attributed to the better control exercised in consequence of there having been a forest officer with a proper establishment of subordinates appointed to this district, plainly illustrating the necessity for a special agency in forest management, even if looked upon from a revenue point of view only.

233. The way in which the removal of forest produce from the Government forests can best be controlled in the Sylhet district, and the requirements of the people as regards forest produce, have been carefully enquired into, and a system of employing respectable people living in the neighbourhood of the forests for selling permits, and watching that no forest produce is removed without them, was proposed, and has, since the close of the year, been sanctioned by the Chief Commissioner.

234. Much difficulty is experienced in the revenue control over timber on account of the imports from Hill Tipperah, as the latter pays no duty, and smuggling of timber from Government forests is thus greatly facilitated. The Deputy-Commissioner has proposed that duty should be collected on timber imported from Hill Tipperah in the same way as is done on timber from Manipur, which question is still under the consideration of the Chief Commissioner. The number of logs brought from Hill Tipperah in 1885-86 by the Juri river alone came to 2,509.

235. The improvements in the yield, as above recorded, and in forest management generally, is, to a great extent, due to the interest taken in forest matters by the Deputy-Commissioner of the district.

Khási and Jaintia Hills division.

236. In the Khási and Jaintia Hills division, the yield of the Government forests has increased. It came to 74 Sâl-trees, as compared with only two sold in the previous year. The other items were unimportant. The revenue collected was Rs. 2,900, as compared with Rs. 1,290 collected in the previous year.

237. The shared forests in this division yielded also more than in the previous year. The total value of the produce removed from them came to Rs. 4,312, as compared with Rs. 360 in 1884-85.

Nága Hills division.

238. In the Nága Hills division only two second-class trees were sold.

Free grants of forest produce.

239. The free grants of forest produce in this Province are made with great liberality; and the opinion that a contented population is better than a surplus in the forest accounts carries great weight with it. The only drawback to this view is that forest improvements, of which the ryots, more than anyone else, derive the advantage eventually, are retarded, because expenditure has to be restricted according to income, or, in other words, these free grants are enjoyed by the present population at the expense of the people who will live after them.

240. The Tabular Statements Nos. 54 and 55 attached to this report show in detail all the produce granted free. Its value was as follows in the different districts.

	Rs.
Gáro Hills	450
Goálpára	1,684
Kámrúp	7,955
Darrang	7,010
Nowgong	488
Sibságar	8,182
Lakhimpur	14,179
Cachar	1,299
Sylhet	15,441
Total	56,688

241. This is exclusive of the free grants made to the Assam Railways and Trading Company, which were, in the year under report, as follows :—

Description of trees.	No.	Rates. Rs.	Value. Rs.	Purpose for which used. For sleepers.	For buildings.	For other purposes.
First-class trees...	1,926	6	11,556	1,851	57	18
Second-class „ ...	429	2	858	12	256	161
Total ...	2,355	...	12,414	1,863	313	179

Imports and exports of forest produce

242. The imports from Manipur and the Lushai Hills into Cachar consisted of the following:—

Timber (logs)	749
Poles	78
Bamboos	258,325
Canes (bundles)	377
Firewood (maunds)	3,210

243. The imports from Hill Tipperah into Sylhet have only been registered on the Juri river, and were as follows :—

Timber (logs)	2,509
Bamboos	182,825
Canes (bundles)	2,010
Sungrass „	4,038

244. The import of rubber for the last four years into Assam is given below for ready comparison:—

	1882-83. Maunds.	1883-84. Maunds.	1884-85. Maunds.	1885-86. Maunds.
Bhutan	24	86	20	31
Towang	1,549	248	134	175
Dafla Hills	535	221	137	459
Nága, Mishmi, and Singpho Hills	1,909	828.	287	215
Lushai Hills	601	135	224	55
Manipur	168	124	.....	48
Total ...	4,586	1,642	802	983

The export of rubber for the last four years by steamer was as follows :—

		1882-83. Maunds.	1883-84. Maunds.	1884-85. Maunds.	1885-86. Maunds.
From Goálpára	...	615	1,484	588	728
„ Kámrúp	...	605	80	100	641
„ Darrang	...	2,152	2,624	2,717	1,440
„ Nowgong	...	1,622	1,154	963	1,510
„ Sibságar	...	428	684	200	741
„ Lakhimpur	...	3,241	3,289	2,752	1,429
„ Sylhet	...	666	462	110	26
„ Cachar	...	.....	15	99	8
Total	...	9,329	9,792	7,529	6,523

In addition to this, 135 maunds were exported by boat from Cachar and Sylhet, making the total exports of rubber in the year under report 6,658 maunds, as compared with 8,092 maunds exported in 1884-85.

245. The provincial imports and exports, as registered at Dhubri on the Brahmaputra and at Bhairab Bázár on the Megna river, were the following:—

Name of forest produce.	Denomination.	Registered at Dhubri.				Registered at Bhairab Bázár.			
		Imports.		Exports.		Imports.		Exports.	
		By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.
Timber	Number	.....	1,446	3,61,884	4,592	600	730	139	.....
Caoutchouc	Maunds	.....	13	.....	6,489	.....	.....	77	58
Lac — Stick	„	.....	.....	1,316	12,336	.....	.....	80	87
Lac — Shell	„	.....	.....	1,481	14,783	.....	.....	.....	10
Lac-dye	„	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos	Number	.....	.....	22,330	270	.....	.....	2,75,000	.....
Thatching-grass	„	.....	.....	7,124,350	.....	.....	.....	.....	.....
Reeds (ekra, nol)	„	.....	.....	84,976	.....	.....	.....	.....	.....
Canes	„	.....	.....	350,059	.....	.....	.....	.....	.....

The imports of timber consist almost exclusively of tea-boxes. The quantity shown in the above statement is about the same as in the previous year, and calls for no special remarks.

The export of timber has increased by 85,221 pieces by the Brahmaputra, and decreased by 537 pieces by the Megna.

Bamboos have this year been exported by the Brahmaputra to the extent of 22,600, whilst none at all were exported in 1884-85. By the Megna only 275,000 were exported, or 686,000 less than in 1884-85, which latter was, as regards the export of bamboos, an exceptionally favourable one.

Rubber is not imported into Assam except for the convenience of shipping it at Dhubri, and it comes either from Eastern Bengal or the Gáro Hills, most probably the latter, so that the above 13 maunds shown as imports are of no particular interest.

The export of cane increased to 350,059 bundles, or 254,480 more than in the previous year.

The export of thatching-grass has risen to 7,124,350 bundles, or 3,467,250 more than in the previous year, and of reeds to 84,976 bundles, or 55,826 more than in the previous year.

Of the latter two descriptions of forest produce, 5,517,100 bundles of thatching-grass and 75,676 bundles of reeds came from Government lands. They pay no royalty in the Brahmaputra Valley, which, at the rate of royalty fixed for the same produce in the Surma Valley, represents a non-collection of Rs. 16,158 forest revenue during the year.

CHAPTER V.

Financial Results.

General

246. The forest revenue collected in the year under report was Rs. 16,243 more than in the previous year. This is not due to any marked improvement of the timber trade with Bengal, but rather to the receipts on account of timber on land allotted for cultivation in the Sibságar

district and the larger receipts in the Sylhet division, in consequence of the appointment of proper forest establishments, a considerable amount of which latter remained uncollected in former years for want of a special agency. It is to the trade in Sâl with Bengal that we must look for an increase in the forest revenue in the immediate future, and arrangements were accordingly made for the working of the Dambu forest by contractors, who, however, found it impossible to carry out the work they had agreed to do, for want of funds at the time they most required them. This breakdown will only cause a temporary stoppage in the working of that forest, and it is hoped to carry out those timber works properly in the current year, both by direct departmental agency, and by encouraging purchasers, as there are signs of the demand for Sâl timber being better next season, which, together with timber works started by the Assam Railways and Trading Company in the Lakhimpur district, and a still further organisation of the system of revenue collection in the Sylhet district, ought to increase the forest receipts considerably.

247. The forest expenditure during the year under report has been Rs. 13,794 more than in the previous year, which is almost entirely accounted for by the promotion of officers to higher grades, and the fact that no officer was on furlough, as had been the case in the previous year.

The expenditure under "A.—Conservancy and Works" was Rs. 2,255 less than in the previous year, and the actual disbursements were even much lower; but heavy advances, made on account of work done in the previous year, remained outstanding at the end of 1884-85, and had to be adjusted in the year under report, which makes the expenditure appear heavier than it was.

The expenditure under "B.—Establishments" was Rs. 16,049 more than in the previous year, which increase is almost entirely on account of the pay and travelling allowances of superior officers, as already stated above.

248. When balancing forest receipts and expenditure for the year under report, the result is a deficit of Rs. 14,837, which has to be attributed to the continued dullness of the timber market, and the breakdown of the contractor who had agreed to work the Dambu forest, and to pay not less than Rs. 20,000 per annum revenue. The *daffadars*, or wood-cutters, who exclusively purchase and work the timber out of the Sâl forests in the Goálpára division, have done next to no work in the year on account of the low prices offered for their Sâl timber, and in the Kámrúp district it has been much the same, except that the shared Jirang forest in the Khási Hills, managed by the Kámrúp Forest Officer, yielded nearly Rs. 4,000 more than in the previous year.

249. It is natural that there should be fluctuation in the timber as in all other trades; but, as far as could be learned, the present dull state of the export trade in Sâl from Assam, which has extended now over several years, is very exceptional, and will in all probability be compensated for by a brisk demand a year or two hence, since the consumption of timber is not a luxury, and cannot be done without, although its use may be deferred at times.

250 There is, however, another and much more weighty reason for the deficit in the forest accounts of Assam, than the short receipts of money, which latter do not by any means represent the yield of the Assam forests, and it is very misleading to strike a balance between the forest income and forest expenditure, when Rs. 69,102 worth of forest produce is given away free, and left out of the cash accounts, as has been the case in the year under report, whilst the expenditure incurred on the conservancy of the forests and the control over the removal of this forest produce given away for nothing, is shown in its entirety in those accounts.

251. As it is considered politic to give away forest produce free, the value of it, it seems to the Conservator, should be taken into account when comparing receipts and expenditure from forest resources, or the value and use of striking a balance is lost

252. The money value of the free grants made during the year, as shown in the Tabular Statements Nos. 54 and 55, according to the present rates of royalty sanctioned by the Chief Commissioner, was, as already stated, Rs. 69,102.

If credit is taken for these free grants, the deficit of Rs. 14,837 is changed into a surplus of Rs. 54,265.

253. An attempt has again been made in Appendix X. of this report to separate the forest revenue collected by the Forest Department from that collected by the Revenue Department. This distinction is a very artificial one, and of little or no practical value, as has been explained in paragraphs 237 to 239 of last year's report.

254. The Tabular Statement No. 62, attached to this report, shows the financial results for each division under the three great heads "I. Departmental timber operations," "II. Other revenue," and "III. Formation, protection, and improvement of forests." The totals for the province, as compared with the previous year, were as follows :—

	1884-85.		1885-86.	
	Receipts.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.
I.—Departmental timber operations	1,540	2,756	1,912	1,602
II.—Other revenue ...	1,78,873	65,822	1,94,745	74,062
III.—Formation, protection, and improvement of forests ...	.....	1,29,122	.....	1,35,830
Total ...	1,80,413	1,97,700	1,96,657	2,11,494

The distribution of receipts and expenditure under the above three heads was made in the same way as explained in the report for 1884-85, paragraph 241.

255. In the following table the forest revenue, collected during the year under report, and classified under the main service heads, is compared with that of 1884-85 :—

Revenue.

Revenue budget heads.	1884-85.			1885-86.			Increase.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
I.—Timber and other produce removed from the forests by Government agency ...	333	0	0	595	13	0	262	13	0
II.—Timber and other produce removed from the forests by consumers and purchasers ...	1,71,891	1	5	1,79,226	13	6	7,335	12	1
III.—Drift and waif wood and confiscated forest produce ...	1,207	9	0	1,316	10	9	109	1	9
IV.—Revenue from forests not managed by Government ...	3,742	5	6	10,271	0	9	6,528	11	3
V.—Miscellaneous ...	3,239	5	5	5,246	5	11	2,007	0	6
Total ...	1,80,413	5	4	1,96,656	11	11	16,243	6	7

It will be seen that there has been an increase under every head; but this increase is as yet very small. The Conservator hopes, however, that it is an indication of the revival of the trade in forest produce.

The increase under "I.—Timber and other produce removed from the forests by Government agency" is small, and almost entirely on account of rubber bought in the Gáro Hills at Rs. 20 per maund, and re-sold at Rs. 30 to Rs. 55, and the price of the rubber obtained by the experimental tapping of rubber-trees in the Darrang division.

The increase under "II.—Timber and other produce removed from the forests by consumers and purchasers" is also but small. It is partly due to the large receipts in the Sibságar division for timber on land allotted for cultivation, and partly the consequence of the better arrangements made in the Sylhet division, already referred to.

The increase under "III.—Drift and waif wood and confiscated forest produce" is trifling, and calls for no special notice.

The increase under "IV.—Revenue from forests not managed by Government" is accounted for by the greater activity in the export of timber from Manipur, carried on by the Mahárája, and the increased timber works carried on during the year in the shared Jirang forest in the Khási Hills.

The increase under "V.—Miscellaneous" occurred chiefly in the Gáro Hills, Goálpára, and Sylhet divisions These receipts are all more or less incidental, and further explanations here are unnecessary.

256. In Appendix VIII. is shown the total income from the sale of different kinds of forest produce, as compared with that of the previous year, in the different divisions.

Expenditure.

257. The expenditure during the year under report is compared with that of 1884-85 in the following table:—

Budget heads.	1884-85.	1885-86.	Increase.	Decrease.
A—Conservancy and Works.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency.	2,687 6 3	1,538 9 0	.....	1,148 13 3
II.—Timber and other produce removed from the forests by consumers and purchasers.	6,070 14 0	6,595 8 8	524 10 8	.....
III.—Drift and waif wood and confiscated forest produce.	68 7 0	63 3 0	.....	5 4 0
IV.—Revenue from forests not managed by Government.	.....	.....	.....	.....
V.—Rent of leased forests, and payments for shareholders in forests managed by Government.	.....	.....	.....	.....
VI.—Live and dead stock	13,989 9 1	11,296 11 10	.....	2,692 13 3
VII.—Communications and buildings.	24,066 13 0	28,350 0 3	4,283 3 3	.....
VIII.—Demarcation, improvement, and extension of forest.	43,083 6 0	39,502 4 4	.....	3,581 1 8
IX.—Miscellaneous	4,773 7 0	5,138 10 6	365 3 6	.....
Total of A—Conservancy and Works.	94,739 14 4	92,484 15 7	5,173 1 5	7,428 0 2
B—Establishments.				
I.—Salaries.....	82,969 8 6	95,878 11 3	12,909 2 9	.....
II.—Travelling allowances	16,295 4 10	18,177 14 9	1,882 9 11	.....
III.—Contingencies	3,695 1 3	4,952 2 6	1,257 1 3	.....
Total of B—Establishments.	1,02,959 14 7	1,19,008 12 6	16,048 13 11	.....
Grand Total of Expenditure...	1,97,699 12 11	2,11,493 12 1	21,221 15 4	7,428 0 2

The decrease under "A I.—Timber and other forest produce removed from the forests by Government agency" is due to no timber having been worked out for building by the department, as was the case in the Gáro Hills in the previous year.

The slight increase under "A II.—Timber and other produce removed from the forest by consumers or purchasers" is accounted for by increased commission paid on *Garkati* revenue collected in the Gáro Hills and revenue collected by mauzadars in the Lakhimpur division.

The decrease under "A VI.—Live and dead stock" is due to no elephant having been purchased in consequence of the retrenchments ordered by Government, whilst in the year before one was bought.

The increase under "A VII.—Communications and buildings" is due to the construction of the Dambu cart road in the Gáro Hills.

The decrease under "A VIII.—Demarcation, improvement, and extension of forests" is owing to the retrenchments ordered by Government, in accordance with which extensions of plantations were limited, and other work also restricted as far as possible.

The increase under "A IX.—Miscellaneous" is chiefly due to the expenditure on articles for the London Exhibition.

The increase under "B—Establishments. I.—Salaries" is accounted for, as already stated, by the promotion of officers, and the fact of no one having been on furlough, as had been the case in 1884-85. The increase under "B II.—Travelling allowance" has to be attributed to the same cause.

The increase under "B III.—Contingencies" is distributed amongst nearly all the divisions; it is due chiefly to increased postage and the cost of sundries.

258. A comparison between receipts and expenditure in the different divisions is made, and the respective surplus or deficit resulting shown in the following statement:—

Surplus and deficit according to divisions.

Name of division.	Receipts.			Expenditure.			Surplus.			Deficit.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Direction ...	11	12	0	25,588	0	4	.....			25,576	4	4
Gáro Hills.	18,813	3	10	42,448	4	5	.....			23,635	0	7
Goálpára ...	16,923	3	5	17,767	5	5	... .			844	2	0
Kámrúp ...	22,262	7	6	27,067	12	6	.....			4,805	5	0
Darrang ...	34,577	6	1	29,439	11	8	5,137	10	5	.....		
Nowgong...	955	3	8	2,751	14	0	.....			1,796	10	4
Sibságar ...	20,025	0	10	16,267	10	3	3,757	6	7	.....		
Lakhimpur.	18,052	5	7	24,767	4	4	.....			6,714	14	9
Cachar	40,683	6	5	16,712	2	2	23,971	4	3	.....		
Sylhet	17,137	0	1	5,328	7	4	11,808	8	9	.....		
Khási and Jaintia Hills	7,211	10	6	3,355	3	8	3,856	6	10	.....		
Nága „	4	0	0	.....			4	0	0	.....		
Total...	1,96,656	11	11	2,11,493	12	1	48,535	4	10	63,372	5	0

The receipts in the Gáro Hills division, as shown in the above table, if compared with those of the previous year, show a slight increase; but the expenditure was so exceptionally high on account of the construction of the Dambu road and the building of a bungalow for the Divisional Forest Officer at Tura, that the result has been a heavy deficit, which, however, is not likely to occur again, as the revenue is certain to increase, and there will not be the same necessity for so large an expenditure in the future.

The receipts in the Goálpára and Kámrúp divisions show a great falling off. This is accounted for, as has already been stated, by the export trade of Sâl having been almost at a standstill. Expenditure was accordingly also very much restricted, wherever this was practicable; but the deficit could not altogether be avoided, without risking the advantages achieved in former years, such as resulted from fire conservancy for instance.

In the Darrang division the receipts have also been slightly less, whilst the expenditure was higher, because a more highly paid officer was in charge, the result of which is, as shown above, a surplus only about half that of 1884-85.

The Nowgong division has only been separated from Darrang for the last three months of the year under report, so that it is too soon to make a fair comparison between receipts and expenditure, because the better organisation and increased establishments have not had time enough to affect the forest income in that district.

The Sibságar division shows a surplus for the first time. The receipts have been much larger than in the previous year on account of the value of timber on land allotted for cultivation, which was quite exceptional, and the expenditure has been here, as everywhere else, restricted as much as possible to meet the retrenchments which were ordered by Government.

The receipts in the Lakhimpur division were slightly less than in the previous year, whilst the adjustments of large advances made in 1884-85, which were allowed to remain unadjusted at the close of that year, made the expenditure exceptionally heavy, the result of which was the heavy deficit shown above.

In the remaining three divisions, Cachar, Sylhet, and the Khási Hills, the receipts have increased; in the last there has been a very marked improvement, and the expenditure in Cachar and the Khási Hills was restricted as far as possible, the result being considerable surplus in all three divisions.

259. The Statement No. 57 attached to this report shows that the value of live and dead stock at the close of the year was Rs. 7,733 more than at the commencement.

Value of stock at the end of the year.

260. The revenue outstanding at the close of the year is shown in Statement No. 60 attached to this report. It was Rs. 14,721, as compared with Rs. 26,867 outstanding at the close of the previous year.

Outstanding revenue.

CHAPTER VI.

General Remarks.

Establishment.

261. The controlling staff remained short of one officer during the whole year, and the executive staff short of one Sub-Assistant-Conservator. The latter has been appointed since the close of the year.

262. Mr. C G. D. Fordyce passed in the higher standard of Assamese, and was promoted to Assistant-Conservator, first grade. Mr. F. S. Barker was similarly promoted.

Messrs. D. P. Copeland and T. J. Campbell, as well as Babu Jogesvar Sur passed the prescribed examinations in Forest Law and Land Revenue systems. The latter also passed in Assamese by the higher standard.

Conservator's Tour.

263. The Conservator left head quarters on the 15th November 1885, and returned on the 17th May 1886.

The number of days spent in each forest division was follows :—

Garo Hills division	...	...	...	21	days
Goálpára " ...	...	...	...	30	"
Kámrúp " ...	...	...	...	22	"
Darrang " ...	...	..	...	15	"
Nowgong " ...	...	...	...	10	"
Sibságar " ...	...	...	...	11	"
Lakhimpur " ...	...	...	...	5	"
Cachar " ...	...	...	...	14	"
Sylhet " ...	...	...	...	32	"
Khási Hills " ...	...	...	...	23	"

Services of Officers.

264. Mr. J. T. Jellicoe was in charge of the Kámrúp division for the first 12 days of the year, after which he received charge of the Darrang and Nowgong division until the 1st of January 1886. On the latter date the Darrang and Nowgong divisions were separated, and Mr. Jellicoe remained in charge of the Darrang division only. He had privilege leave for three months; and out of the nine months he was on duty he travelled for 209 days.

Mr. A. J. Mein returned from leave on the 3rd of April and received charge of the Kámrúp division on the 13th of the same month, which he kept to the close of the year. He travelled for 115 days.

Mr. C. G. D. Fordyce had charge of the Sibságar division for nine months; the other three months he was on privilege leave. He travelled for 139 days.

Mr. F. S. Barker was in charge of the Lakhimpur division during the whole year. He was absent from head-quarters for 255 days in the year.

Mr. D. P. Copeland was in charge of the Gáro Hills division from the commencement of the year to the 1st June, after which he received charge of the Goálpára division, which he kept until the close of the year. In addition to this, he had charge of the Dámbu road work from the 1st June to the end of September. Mr. Copeland was on privilege leave for 84 days, and, during the 281 days he was on duty he was absent from head-quarters for 240 days.

Mr. T. J. Campbell was in charge of the Darrang and Nowgong division from the commencement of the year until the end of April, when he was transferred to the Gáro Hills division, which remained in his charge until the close of the year. In addition to this, he was also in charge of the Working Plans division from the 1st January 1886, until the close of the year. He had two months and five days' privilege leave and during the 284 days he was on duty he travelled 230 days.

Mr. H. G. Young was in charge of the Cachar division during the whole year. He travelled for 137 days.

Babu Jogesvar Sur was in charge of the Goálpára division from the commencement of the year until the 14th of July, when he was transferred to the Darrang and Nowgong division, and had charge of the latter for the three months Mr. Jellicoe was on leave. He then was placed on special duty in the Nowgong district until he received charge of the Nowgong division on the 1st January 1886, which he kept until the close of the year. Babu Jogesvar Sur travelled for 238 days in the year.

Babu Tara Kisor Gupta was employed on special duty in the Gáro Hills from the commencement of the year until the 1st of June, when he went on privilege leave for one month, and on the 1st July received charge of the Sylhet division, which he kept for the remainder of the year. Out of the 11 months he was on duty he travelled 101 days.

RETURNS.

ANNUAL FORM No. 49.

FOREST DEPARTMENT, ASSAM.—AREA OF RESERVED, PROTECTED, AND DISTRICT FORESTS, 1885-86.

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1885.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1886.		Number and date of notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
			Reserved Forests.							
Gáro Hills	Northern Range	Gáro Hills district	Dibru Hill	6,080	9	....	.....	6,080	9	
	Ditto ditto		Jinari	6,640	10	....	.....	6,640	10	
	Ditto ditto		Chima and Bangshi	8,680	14	....	.....	8,680	14	
	Ditto ditto		Dhima	5,760	9	....	.....	5,760	9	
	Ditto ditto		Dilma	1,120	2	....	.....	1,120	2	
	Ditto ditto		Rajasimla	4,800	7	....	.....	4,800	7	
	Ditto ditto		Ildek	1,280	2	....	.....	1,280	2	
	Ditto ditto		Darugiri	2,283	4	....	.....	2,283	4	
	Ditto ditto		Rangrengiri	8,480	13	....	.....	8,480	13	
	Southern ditto		Emangiri	2,080	3	....	.....	2,080	3	
	Ditto ditto		Rewak	1,280	2	....	.....	1,280	2	
	Ditto ditto		Siju	1,280	2	....	.....	1,280	2	
	Ditto ditto		Bolsalgiri	640	1	....	.....	640	1	
	Ditto ditto		Tura	480	1	....	.....	480	1	
	Northern ditto		Dambu	4,960	8	....	596	4,364	7*	
	Ditto ditto		Songsak	.....	....	9,280	.....	9,280	15	No. 29, dated 1st October 1885.
Goálpára	Eastern ditto	Goálpára ditto	Bijni Duár	8,038	12	....	.....	8,038	13	
	Ditto and western range.		Chirang Duar No. 1	69,203	108	....	.....	69,203	108	
	Western range		Ditto ditto 2	90,643	142	....	.....	90,643	142	
	Ditto ditto		Ripu Duár	41,632	65	....	.....	41,632	65	
	Guma ditto		Guma	15,776	25	....	.....	15,776	25	
	Eastern ditto		Sidli	43,757	68	....	.....	43,757	68	
	Western ditto		Jengasi Charaldaka	1,730	3	....	.....	1,730	3	
	Ditto ditto		Atiabari	9,180	14	....	.....	9,180	14	
	Eastern ditto		Bengtol and Darogaon.	7,470	12	....	.....	7,470	12	
	Ditto ditto		Bhumeswar Hill	4,033	6	....	.....	4,033	6	
Kámrúp	Kulsi ditto	Kámrúp ditto	Barduar	15,896	25	....	.....	15,896	25	
	Ditto ditto		Pantan	21,910	34	....	.....	21,910	34	
	Jirang ditto		Matnikhar	2,240	4	....	.....	2,240	3	
	Kulsi ditto		Kulsi plantation	3,680	6	....	.....	3,680	6	
	Rani ditto		Jara	1,037	2	....	.....	1,037	2	
	Kulsi ditto		Milmillia	3,610	6	....	.....	3,610	6	
	Ditto ditto		Mayang	4,800	7	....	.....	4,800	7	
	Rani ditto		Rani	11,070	17	....	.....	11,070	17	
	Ditto ditto		Kawa Singh	3,570	6	....	.....	3,570	6	
	Singra ditto		Simla Hill	317	....	....	.....	317	....	
	Ditto ditto		Dumpara	497	1	....	.....	497	1	
	Ditto ditto		Khákai, Sikrabura Hill.	2,530	4	....	.....	2,530	4	
	Ditto ditto		Ghoraputa	120	....	....	.....	120	....	
	Ditto ditto		Khatkhati Hills	644	1	....	.....	644	1	
	Ditto ditto		Tareibari	806	1	....	.....	806	1	
	Ditto ditto		Garubaldha	240	....	....	.....	240	....	
	Ditto ditto		Khurkhuri	149	....	....	.....	149	....	
	Ditto ditto		Sursuria Hills	970	2	....	.....	970	2	
	Ditto ditto		Gizang	930	1	....	.....	930	1	
	Ditto ditto		Jaipur	774	1	....	.....	774	1	
	Ditto ditto		Baradobha	1,190	2	....	.....	1,190	2	
	Ditto ditto		Nampathar	640	1	....	.....	640	1	
	Ditto ditto		Barjuli	1,120	2	....	.....	1,120	2	
	Northern ditto		Hajo	226	....	20	3	243	....*	
	Kulsi ditto		Chhaygaon	.....	....	2,705	.....	2,705	4	No. 25, dated 25th September 1885.
Nowgong	Western ditto	Nowgong ditto	Kholuhat	1,878	3	....	.....	1,878	3	
	Eastern ditto		Deboka	520	1	....	.....	520	1	
	Ditto ditto		Diju	2,730	4	....	.....	2,730	4	
	Central ditto		Ballpára	56,224	88	....	.....	56,224	88	
	Western ditto		Khalingduar	6,240	10	....	.....	6,240	10	
	Ditto ditto		Addition to Khalingduar.	6,972	11	....	.....	6,972	11	
Darrang	Central ditto	Darrang ditto	Chardnár	64,141	100	....	.....	64,141	100	
	Ditto ditto		Bhamaraguri	386	1	....	.....	386	1	
	Ditto ditto		Garumari	205	....	....	.....	205	....	
	Eastern ditto		Nowdnár	52,480	82	....	.....	52,480	82	
	Central ditto		Singri Hill	1,200	2	....	.....	1,200	2	
Sibságar	Golághát ditto	Nága Hills ditto	Nambor	249,312	390	....	.....	249,312	390	
	Ditto ditto		Mikir Hill	51,840	81	....	.....	51,840	81	
	Ditto ditto		Upper Daigurung	5,312	8	....	.....	5,312	8	
	Ditto ditto		Lower ditto	5,120	8	....	.....	5,120	8	
	Jorhat ditto		Holongapar	4,892	8	....	.....	4,892	8	
	Sibságar ditto	Sibságar ditto	Dirai	11,773	18	....	.....	11,773	18	
	Ditto ditto		Abhaypur	15,911	25	....	.....	15,911	25	
	Ditto ditto		Sola	1,661	3	....	.....	1,661	3	
	Jorhát ditto		Desai	6,893	11	....	.....	6,893	11	
	Ditto ditto		Jhansi	18,380	29	....	18,380	.....	....	
Cachar	Sonai ditto	Cachar ditto	Upper Jiri	15,360	24	....	.....	15,360	24	No. 22, dated 5th August 1885.
	Ditto ditto		Lower „	8,960	14	....	.....	8,960	14	
	Ditto ditto		Barak	42,880	67	....	.....	42,880	67	
	Ditto ditto		Sonai	11,520	18	....	.....	11,520	18	
	Matijuri ditto		Katakhal	51,200	80	....	.....	51,200	80	
	Ditto ditto		Dhaleswari	21,120	33	....	.....	21,120	33	
	Ditto and Sonai Range.		Inner Line	325,760	509	....	.....	325,760	509	
Khási and Jaintia Hills.	Jowai	Khási and Jaintia Hills district.	Saipung	32,000	50	....	.....	32,000	50	
			Total	1,199,141	2,342	12,005	18,979	1,492,167	2,332	
			Protected Forests.							
Kámrúp	Singra	Kámrúp	Jharikhuri	1,235	2	....	.....	1,235	2	
Ditto	Ditto	Ditto	Bura Gohain	620	1	....	.....	620	1	
Ditto	Ditto	Ditto	Mogukhal	180	....	....	.....	180	....	
Sibságar	Sibságar	Sibságar	Panidehingia	19,200	30	....	.....	19,200	30	
Lakhimpur	North Lakhimpur.	Lakhimpur	Bharolwah	5,280	8	....	.....	5,280	8	
Ditto	Ditto ditto	Ditto	Kuddum	15,866	25	....	.....	15,866	25	
Ditto	Dibrugarh	Ditto	Parapara	26,720	42	....	.....	26,720	42	
Ditto	Makum	Ditto	Upper Dehing	151,584	237	....	.....	151,584	237	
Ditto	Dibrugarh	Ditto	Dehingmukh	13,747	21	....	.....	13,747	21	
Ditto	Ditto	Ditto	Jokai	12,954	20	....	.....	12,954	20	
Ditto	Makum	Ditto	Solaguri	68,122	106	....	.....	68,122	106	
Sylhet	Kamalghat	Sylhet	Langai and Singla	108,800	170	....	.....	108,800	170	
Cachar	North Cachar	Cachar	North Cachar	128,000	200	....	.....	128,000	200	
			Total	552,308	862	....	.....	552,308	862	

* Rectification.

ANNUAL FORM No. 49.—(*Concluded*).

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1885.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1886.		Number and date of notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
			District Forests.							
Goálpára ..	.....	Goálpára ..	Within revenue limits.	141,930	222	....	.....	141,930	222	
Kámrúp ..	.....	Kámrúp ..	Ditto ditto..	322,131	503	....	2,705*	319 426	499	
Darrang ..	.....	Darrang ..	Ditto ditto..	122,167	191	318†	2,430‡	120,055	188	
Nowgong ..	.....	Nowgong ..	Ditto ditto..	221,057	345	2,166†	.....	223,223	349	
Sibságar ..	.....	Sibságar ..	Ditto ditto..	282 501	363	18,380§	.....	250,881	392	
Lakhimpur	....	Lakhimpur ..	Ditto ditto..	1,300,569	2,032	30,080‖	1,949‡	1,328,640	2,076	
Cachar ..	.....	Cachar ..	Ditto ditto..	49,754	78	....	4,747‡	45,006	70	
Sylhet ..	.....	Sylhet ..	Ditto ditto..	56,805	89	2,937†	2,151‡	57,591	90	
Gáro Hills	.....	Gáro Hills ..	Beyond ditto..	168,157	263	590¶	9 280*	159,473	249	
Lakhimpur	. .....	Lakhimpur ..	Ditto ditto..	960,000	1,500	....	30,080‖	929 920	1,453	
Cachar ..	.....	Cachar ..	Ditto ditto..	135,010	211	....	.....	135,040	211	
Khási and Jaintia Hills.	.....	Khási and Jaintia Hills.	Ditto ditto..	64,000	100	....	.....	64,000	100	
Nága Hills	.....	Nága Hills ..	Ditto ditto..	315,328	493	....	.....	315,328	493	
			Total....	4,089,378	6,390	54,477	53,342	4,090,513	6,392	

* Declared reserve. | † Resumption of waste land grants. | ‡ Waste land grants. | § Excluded from reserve.
‖ Transferred from "beyond" to within revenue limits. | ¶ Excluded from reserve owing to resurvey.

FORM No 50.

FOREST DEPARTMENT, ASSAM.—REGISTER OF BREACHES OF FOREST RULES DURING 1885-86.

I. PROSECUTIONS IN THE COURTS OF LAW.

Forest division and civil district.	Cases pending from 1884-85.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Gáro Hills division—														
Gáro Hills district	8	...	.....	.....	1	1	9	3	3	5	16	8	19	1
Goálpára division—														
Goálpára district	2	1	2	.....	2	5	7	5	11	2	2	7	13	...
Kámrúp division—														
Kámrúp district	...	...	2	.....	1	3	3	3	15	...	...	3	15	...
Darrang division—														
Darrang district	...	1	2	.....	3	6	6	6	26	...	10	6	36	...
Nowgong division—														
Nowgong district	...	2	.....	.....	...	2	2	1	1	1	1	2	2	...
Sibságar division—														
Sibságar district	...	...	9	.....	...	9	9	7	10	2	6	9	16	...
Lakhimpur division—														
Lakhimpur district	3	...	9	.....	...	9	12	7	44	5	11	12	55	...
Cachar division—														
Cachar district	...	...	6	.....	3	9	9	6	8	2	3	8	11	1
Sylhet division—														
Sylhet district	...	...	6	.....	1	7	7	3	5	3	9	6	14	1
Total	13	4	36	.....	11	51	64	39	123	20	58	61	181	3

FORM No. 51.

FOREST DEPARTMENT, ASSAM.—AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON OF 1886.

Division	Forest tracts.	Year in which protection commenced.	Area actually protected on 30th June 1885.	During dry season of 1886.			Cost during the season.
				Area attempted to be protected.	Failures.	Actually protected.	
	Goálpára district.						Rs.
Goálpára	Sidli	1876-77	31,182	32,324	425	31,899	1,980
	Guma	"	15,776	15,776	15	15,761	1,867
	Panbari and Pechadaveri	1875-76	3,100	3,250	.....	3,250	121
	Total	.....	50,058	51,350	440	50,910	3,968
	Kámrúp district.						
Kámrúp	Barduar	1873-74	12,400	14,400	200	14,200	640
	Pantan	"	10,961	10,961	.....	10,961	353
	Kulsi plantation	"	2,349	2,349	.....	2,349	1,005
	Milmillia	1874-75	2,680	2,410	.....	2,410	87
	Mayang	1882-83	4,800	4,800	.....	4,800	64
	Mayang Block	"	.....	6,000	3,000	3,000	55
	Rani (Moirakanda block)	"	8,400	4,500	10	4,490	52
	Jara Sâl	1873-74	820	820	.....	820	144
	Kawa Sing	1882-83	3,060	3,260	.....	3,260	178
	Mataikhar	1873-74	1,780	1,780	60	1,720	181
	Hajo	1884-85	.....	200	140	60	34
	Singra Range—						
	Simla Hills	1882-83	1,573	300	.....	300	2
	Dumpara			450	.....	450	4
	Khaksi Sikrabura			2,500	.....	2,500	13
	Ghoraputa			120	20	100	1
	Khatkhati			640	240	400	5
	Tareibari			640	.....	640	5
	Garubaldha			240	40	200	2
	Khurkuri			140	.....	140	1
	Sursuria			970	.....	970	4

	Jarikhuri	1885-86	.....	1,200	.....	1,200	7
	Buragohain	"	.....	600	.....	600	4
	Mogakhal	"	.....	170	.....	170	2
	Total	.....	48,823	59,450	3,710	55,740	2,843
	Darrang District.						
Darrang	Bálipára	1873-74	4,570	4,570	.....	4,570	343
	Garumari	1874-75	180	180	.....	180	33
	Charduar	1878-79	892	892	.....	892	36
	Bamuni Hill	"	8	8	.....	8	12
	Kualingduar	1883-84	12,892	12,892	.....	12,892	4
	Total	.....	18,542	18,542	.....	18,542	428
	Nowgong District.						
Nowgong	Kholahát	1873-74	1,874	1,878	4	1,874	174
	Deboka	"	520	8,870	200	8,670	133
	Diju	1879-80	2,725	2,730	22	2,708	83
	Suang	1885-86	.....	1,924	150	1,774	74
	Bamoni	"	.....	499	115	384	39
	Total	.....	3,419	15,901	491	15,410	503
	Khási and Jaintia Hills District.						
Khási and Jaintia Hills	Shillong	1874-75	3,612	3,618	.....	3,618	798
	Riatkhwan	1881-82	937	960	.....	960	207
	Total	.....	4,549	4,578	.....	4,578	1,005
	Grand Total	.....	125,391	149,821	4,641	145,180	8,747

FORM No. 52.

FOREST DEPARTMENT, ASSAM.—AREA OF PLANTATIONS, 1885-86.

Division.	Name of plantation.	Area in acres. On 1st April 1885.	Added during the year.	Excluded during the year.	Area on 31st March 1886.	Receipts of the year.	Charges of the year.
Regular Plantations.		Acres.	Acres.	Acres.	Acres		Rs
Gáro Hills	Tura Cinchona nursery	.....	.....	.....	.....	.....	117
	Total	.....	.....	.....	.....	.....	117
	Kulsi Plantation.						
Kámrúp	Caoutchouc	148	.....	.....	148	.....	1,010
	Teak	168	.....	.....	168	.....	271
	Sisu	20	.....	.....	20	.....	136
	Bamboo	2	.....	.....	2	.....	16
	Add cost of nursery work	.....	.....	.....	.....	.....	412
	Total	338	.....	.....	338	.....	1,845
	Charduár Plantation.						
Darrang	Caoutchouc	1,012	31	.....	1,043	.....	4,004
	Bamuni Hill Plantation.						
	Caoutchouc	8	.....	.....	8	.....	10
	Total	1,020	31	.....	1,051	.....	4,014
	Makum Plantation.						
Lakhimpur	Teak	2	.....	.....	2	.....	.....
	Total	2	....	.....	2	.....	.....
Khási and Jaintia Hills	Shillong timber plantation	.....	.....	.....		.....	523
	Total	.....	.....	.....		.....	523
	Total regular plantation ...	1,360	31	.....	1,391	.....	6,499
Cultural Operations.							
Sibságar	Nambor timber operations	101	5	.....	106	.....	301
	Total cultural operations ...	101	5	.....	106	.....	301
	Grand Total ...	1,461	36	.....	1,497	.....	6,800

FORM No. 53.

FOREST DEPARTMENT, ASSAM.—TREES FELLED OR GIRDLED BY GOVERNMENT AGENCY DURING THE YEAR 1885-86.

(*Selection Fellings.*)

Division.	Trees felled or girdled. Description.	Number
Gáro Hills	Sâl	15
	Sama	1
	Poma	2
	Total ...	18
	Abstract of the Circle.	
	Sâl	15
	Sama	1
	Poma	2
	Total ...	18

FORM No. 54.

FOREST DEPARTMENT, ASSAM.—OUTTURN OF TIMBER AND FIREWOOD DURING THE YEAR 1885-86.

Division.	Description of material.	Outturn in cubic feet.									REMARKS.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by					
						Government agency.	Purchasers.	Free grants.		Right-holders.	
								Quantity.	Value.		
I.—Reserved Forests.									Rs		
Gáro Hills ...	Sâl-trees ...	2,190	.....	.....	2,190	.....	840	1,350	450	.....	
	„ (dead wood) ...	230	.....	.....	230	.....	230	.....	.....	.....	
	Total ...	2,420	.....	.....	2,420	.....	1,070	1,350	450	.....	
Goálpára ...	Sâl-trees ...	14,280	.....	.....	14,280	.....	14,280	.....	.....	.....	
	First-class trees ...	4,110	.....	.....	4,110	.....	4,110	.....	.....	.....	
	Second-class trees ...	2,040	.....	.....	2,040	.....	2,040	.....	.....	.....	
	Dead timber ...	32,870	.....	.....	32,870	.....	32,870	.....	.....	.....	
	Charcoal ...	436	.....	.....	436	.....	436	.....	.....	.....	
	Total ...	53,736	.....	.....	53,736	.....	53,736	.....	.....	.....	
Kámrúp ...	Sâl-trees ...	46,798	.....	.....	46,798	1,476	45,322	.....	.....	.....	
	First-class trees ...	3,322	.....	.....	3,322	.....	3,322	.....	.....	.....	
	Second-class trees ...	2,496	.....	.....	2,496	.....	2,376	120	24	.....	
	Dead wood ...	41,934	.....	.....	41,934	.....	23,316	18,618	3,724	.....	
	Charcoal ...	540	.....	.....	540	.....	540	.....	.....	.....	
	Firewood ...	10,000	.....	.....	10,000	.....	.....	10,000	156	.....	
	Bamboos (No.) ...	239	.....	.....	239	.....	239	.....	.....	.....	
	Total ...	105,090	.....	.....	105,090	1,476	74,876	28,738	3,904	.....	

Darrang ...	Sâl-logs ...	37	.....	.....	37	.....	37	.....	.....
	First-class trees ...	1,325	.....	.....	1,325	.....	1,325	.....	.....
	Second-class trees ...	10,800	.....	.....	10,800	.....	10,800	.....	.....
	Dead wood ...	237	.....	.....	237	.....	237	.....	.....
	Poles and oars ...	34	.....	.....	34	.....	34	.....	.....
	Firewood permits (No.)	3	.....	.....	3	.....	3	.....	.....
	Bamboos (No.) ...	400	.....	.....	400	.....	400	.....	.....
	Total ...	12,433	.....	.....	12,433	.....	12,433	.....	.....
Nowgong ...	Sâl-trees ...	550	.....	.....	550	.....	550	.....	.....
	First-class trees ...	50	.....	.....	50	.....	50	.....	.....
	Second-class trees ...	125	.....	.....	125	.....	125	.....	.....
	Firewood ...	1,350	.....	.....	1,350	.....	1,350	.....	.....
	Total ...	2,075	.....	.....	2,075	.....	2,075	.....	.....
Sibsâgar ...	First-class trees ...	4,900	.....	.....	4,900	.....	4,900	.....	.....
	Second-class trees ...	10,925	.....	.....	10,925	.....	10,925	.....	.....
	Boats ...	360	.....	.....	360	.....	360	.....	.....
	Saplings ...	21,564	.....	.....	21,564	.....	21,564	.....	.....
	Dead wood ...	604	.....	.....	604	.....	604	.....	.....
	Firewood ...	6,150	.....	.....	6,150	.....	6,150	.....	.....
	Bamboos (No.) ...	775	.....	.....	775	.....	775	.....	.....
	Total ...	44,503	.....	.....	44,503	.....	44,503	.....	.....
Cachar ...	First-class logs ...	13,228	.....	.....	13,228	.....	13,228	.....	.....
	Second-class logs ...	14,946	.....	.....	14,946	.....	14,946	.....	.....
	Third-class " ...	137,987	.....	.....	137,987	.....	137,987	.....	.....
	Drift wood ...	1,008	.....	.....	1,008	.....	1,008	.....	.....
	Scantlings ...	444	.....	.....	444	.....	444	.....	.....
	Poles ...	1,312	.....	.....	1,312	.....	1,248	64	12
	Firewood ...	6,897	.....	.....	6,897	.....	6,897	.....	.....
	" (drift) ...	2,381	.....	.....	2,381	.....	2,381	.....	.....
	Bamboos (No.) ...	565,475	.....	.....	565,475	.....	563,775	1,700	17
	" (drift) (No.)	35	.....	.....	35	.....	35	.....	.....
	Total ...	178,203	.....	.....	178,203	.....	178,139	64	29
	Total Reserved Forests	398,460	.....	.....	398,460	1,476	366,832	30,152	4,383

FORM No. 54.—(*Continued.*)

Division.	Description of material.	Outturn in cubic feet.									Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by					
						Government agency.	Purchasers.	Free grants.		Right-holders.	
								Quantity.	Value.		
II.—Protected Forests.											
Kámrúp ...	Dead wood ...	18	.....	.....	18	.....	18	.....	.....	.....	
	Total ...	18	.....	.....	18	.....	18	.....	.....	.....	
Sibságar ...	First-class trees ...	75	.....	.....	75	.....	75	.....	.....	.....	
	Total ...	75	.....	.....	75	.....	75	.....	.....	.....	
Lakhimpur ...	First-class trees ...	16,470	.....	.....	16,470	.....	.....	16,470	3,294	.....	
	Second-class trees ...	1,240	.....	.....	1,240	.....	.....	1,240	82	.....	
	Total ...	17,710	.....	.....	17,710	.....	.....	17,710	3,376	.....	
Cachar ...	Scantlings ...	4,184	.....	.....	4,184	.....	4,184	.....	.....	.....	
	Bamboos (No.) ...	1,400	.....	.....	1,400	.....	1,400	.....	.....	.....	
	Total ...	4,184	.....	.....	4,184	.....	4,184	.....	.....	.....	
Sylhet ...	First-class logs ...	21,600	.....	.....	21,600	.....	21,600	.....	.....	.....	
	Second " ...	2,295	.....	.....	2,295	.....	2,295	.....	.....	.....	
	Third " ...	14,545	.....	.....	14,545	.....	14,545	.....	.....	.....	
	Posts and planks ...	660	.....	.....	660	.....	660	.....	.....	.....	
	Firewood ...	50	.....	.....	50	.....	50	.....	.....	.....	
	Bamboos (No.) ...	247,525	.....	.....	2,47,525	.....	2,47,525	.....	.....	.....	
	Total ...	39,150	.....	.....	39,150	.....	39,150	.....	.....	.....	
	Total Protected Forests	61,137	.....	.....	61,137	.....	43,427	17,710	3,376	.....	

	III.—District Forests.									
Gáro Hills ...	Sâl-trees ...	2,190	.....	.....	2,190	.....	2,190	.....	.....	.....
	First-class trees ...	12,270	.....	.....	12,270	.....	12,270	.....	.....	.....
	Second-class trees ...	6,690	.....	.....	6,690	.....	6,690	.....	.....	.....
	Dead wood ...	19,360	.....	.....	19,360	.....	19,360	.....	.....	.....
	Dugouts ...	27,450	.....	.....	27,450	.....	27,450	.....	.....	.....
	Drift and waif wood...	1,700	.....	.....	1,700	1,700	.....	.....	.....	.....
	Sâl beams ...	3	.....	.....	3	3	.....	.....	.....	.....
	„ scantlings ...	34	.....	.....	34	34	.....	.....	.....	.....
	Planks ...	135	.....	.....	135	135	.....	.....	.....	.....
	Total.....	69,832	.....	.....	69,832	1,872	67,960	.....	.....	.....
Goálpára ...	Sâl-trees ...	90	.....	.....	90	.....	90	.....	.....	.....
	First-class trees ...	600	.....	.....	600	.....	600	.....	.....	.....
	Second-class trees ...	21,060	.....	.....	21,060	.....	810	20,250	1,350	.....
	Dead timber ...	2,220	.....	.....	2,220	.....	1,150	1,070	214	.....
	Firewood ...	7,680	.....	.....	7,680	.....	.....	7,680	120	.....
	Total.....	31,650	.....	.....	31,650	.....	2,650	29,000	1,684	.....
Kámrúp ...	Sâl-trees ...	32,971	.....	.....	32,971	.....	32,971	.....	.....	.....
	First-class trees ...	5,158	.....	.....	5,158	.....	5,158	.....	.....	.....
	Second-class trees	5,412	.....	.....	5,412	.....	5,097	315	21	.....
	Dead wood ...	3,517	.....	.....	3,517	.....	936	2,581	516	.....
	Firewood ...	225,000	.....	.....	225,000	.....	1,100	223,900	3,498	.....
	Charcoal ...	702	.....	.....	702	.....	702	.....	.....	.....
	Bamboos (No.) ...	700	.....	.....	700	.....	100	600	6	.....
	Total.....	272,760	.....	.....	272,760	.....	45,964	226,796	4,041	.....
Darrang ...	First-class trees ...	41,160	.....	.....	41,160	.....	6,300	34,860	6,972	.....
	Second-class trees ...	10,550	.....	.....	10,550	.....	10,550	.....	.....	.....
	Poles ...	1,788	.....	.....	1,788	.....	1,788	.....	.....	.....
	Charcoal ...	8,080	.....	.....	8,080	.....	8,080	.....	.....	.....
	Firewood permits (No.)	8	.....	.....	8	.....	8	.....	.....	.....
	Bamboos (No.) ...	335	.....	.....	335	.....	315	20	.....	.....
	Total.....	61,578	.....	.....	61,578	.....	26,718	34,860	6,972	.....

FORM No. 54.—(*Concluded.*)

Division.	Description of material.	Outturn in cubic feet.									Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by					
						Government agency.	Purchasers.	Free grants.		Right-holders.	
								Quantity.	Value.		
Nowgong	Sâl-trees	216	.....	.....	216	.....	216	.....	.....	.....	
	First-class trees	3,960	.....	.....	3,960	.....	3,960	.....	.....	.....	
	Second-class trees	14,160	.....	.....	14,160	.....	6,840	7,320	488	.....	
	Dead wood	3,633	.....	.....	3,633	.....	3,633	.....	.....	.....	
	Charcoal	6,795	.....	.....	6,795	.....	6,795	.....	.....	.....	
	Firewood	882	.....	.....	882	.....	882	.....	.....	.....	
	Total	29,646	.....	.....	29,646	.....	22,326	7,320	488	.....	
Sibságar	First-class trees	11,175	.....	.....	11,175	.....	11,175	.....	.....	.....	
	Second „ „	145,150	.....	.....	145,150	.....	26,650	118,500	7,900	.....	
	Boats	4,240	.....	.....	4,240	.....	4,240	.....	.....	.....	
	Saplings	5,982	.....	.....	5,982	.....	5,982	.....	.....	.....	
	Dead wood	488	.....	.....	488	.....	488	.....	.....	.....	
	Driftwood	1,290	.....	.....	1,290	.....	1,290	.....	.....	.....	
	Firewood	24,540	.....	.....	24,540	.....	12,700	11,840	185	.....	
	Charcoal	49,311	.....	.....	49,311	.....	49,311	.....	.....	.....	
	Bamboos (No.)	4,924	.....	.....	4,924	.....	500	4,424	44	.....	
	Total	242,176	.....	.....	242,176	.....	111,836	130,340	8,129	.....	
Lakhimpur	First-class trees	82,410	.....	.....	82,410	.....	25,290	57,120	11,424	.....	
	Second „ „	209,470	.....	.....	209,470	.....	32,580	176,890	11,792	.....	
	Total	291,880	.....	.....	291,880	.....	57,870	234,010	23,216	.....	

Cachar ...	First-class logs ...	15,136	.....	.....	15,136	.....	15,136	.....	.....	.....
	Second „ „ ...	4,412	.....	.....	4,412	.....	4,412	.....	.....	.....
	Third „ „ ...	31,936	.....	.....	31,936	.....	31,936	.....	.....	.....
	Drift wood ...	762	.....	.....	762	.....	762	.....	.....	.....
	Scantlings ...	1,342	.....	.....	1,342	.....	1,342	.....	.....	.....
	Poles ...	3,964	.....	.....	3,964	.....	712	3,252	650	.....
	Firewood ...	2,797	.....	.....	2,797	.....	1,932	865	14	.....
	„ (drift) ...	1,165	.....	.....	1,165	.....	1,165	.....	.....	.....
	Bamboos (No.) ...	161,708	.....	.....	161,708	.....	106,533	55,175	552	.....
	„ (drift) („) ...	850	.....	.....	850	.....	850	.....	.....	.....
	Total ...	61,514	.....	.....	61,514	.....	57,397	4,117	1,216	.....
Sylhet ...	First-class logs ...	4,089	.....	.....	4,089	.....	4,089	.....	.....	.....
	Second „ „ ...	1,827	.....	.....	1,827	.....	1,827	.....	.....	.....
	Third „ „ ...	5,591	.....	.....	5,591	.....	5,591	.....	.....	.....
	Dugouts ...	61	.....	.....	61	.....	61	.....	.....	.....
	Posts and planks ...	44	.....	.....	44	.....	44	.....	.....	.....
	Firewood ...	64,910	.....	.....	64,910	.....	92	64,818	1,013	.....
	Bamboos (No.) ...	1,421,018	.....	.....	1,421,018	.....	74,675	1,346,343	13,463	.....
	Total ...	76,522	.....	.....	76,522	.....	11,704	64,818	14,476	.....
Khási and Jaintia Hills	Sâl dugouts ...	1,850	.....	.....	1,850	.....	1,850	.....	.....	.....
	First-class trees ...	75	.....	.....	75	.....	75	.....	.....	.....
	Saplings ...	19,500	.....	.....	19,500	.....	19,500	.....	.....	.....
	Total ...	21,425	.....	.....	21,425	.....	21,425	.....	.....	.....
Nága Hills ...	Second-class trees ...	60	.....	.....	60	.....	60	.....	.....	.....
	Total ...	60	.....	.....	60	.....	60	.....	.....	.....
	Total District Forests.	1,159,043	.....	.....	1,159,043	1,872	425,910	731,261	60,222	.....
	Grand Total ...	1,618,640	.....	.....	1,618,640	3,348	836,169	779,123	67,981	.....

FORM No. 55.

FOREST DEPARTMENT, ASSAM.—OUTTURN OF MINOR FOREST PRODUCE DURING 1885-86.

Division.	Description of produce.	Produce removed or utilised.									
		By Government agency.		By purchasers.		By free grants.		By right holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity	Value.	Quantity.	Value.	Quantity.	Value.
		I.—RESERVED FORESTS.									
			Rs.		Rs.						Rs.
Goálpára	Canes (bndls)	...	...	400	3	.....	.....	...	...	400	3
	Total ...	...	...	400	3	.....	.....	...	...	400	3
Kámrúp ...	Canes (bndls)	...	...	60	.....	50	.....	...	...	110	.....
	Silkworm trees	...	...	242	34	.....	.....	...	...	242	34
	Betel creepers	...	...	26	5	.....	.....	...	...	26	5
	Lac tree	...	...	1	1	.....	.....	...	...	1	1
	Rubber (mds.)	1	70	.....	.....	.....	.....	...	...	1	70
	Total ...	1	70	329	40	50	.....	...	...	380	110
Darrang ...	Rubber (mds.)	7	525	.....	.....	.....	.....	...	...	7	525
	Canes (bndls.)	...	...	9,600	76	.....	.....	...	...	9,600	76
	Total ...	7	525	9,600	76	.....	.....	...	...	9,607	601
Nowgong	Canes (bndls)	...	...	4,596	34	.....	.....	...	...	4,596	34
	Total ...	...	...	4,596	34	.....	.....	...	...	4,596	34

Sibságar ...	Canes (bndls.) ...	...	...	...	4,100	32	.....	.....	...	...	4,100	32
	Bill-grass	...	...	...	.....	108	.....	.....	...	...	.....	108
	Total	...	...	...	4,100	140	.....	.....	...	...	4,100	140
Cachar ...	Agar (baskets) ...	...	...	...	6	9	.....	.....	...	...	6	9
	Canes (bndls) ...	...	...	...	18,928	1,183	28	2	...	...	18,956	1,185
	Total	...	...	...	18,934	1,192	28	2	...	...	18,962	1,194
Khási and Jaintia Hills ..	Other minor produce ...	...	...	...	.....	211	.....	.....	...	...	.....	211
	Total	...	...	...	.....	211	.....	.....	...	...	.....	211
	Total Reserved Forests	...	8	595	37,959	1,696	78	2	...	...	38,045	2,293
	II.—Protected Forests.											
	Nil.											
	III.—District Forests.											
Gáro Hills ...	Foreign permits ...	...	...	...	3,281	6,562	.....	.....	58	116	3,339	6,678
	Inner Line „ ...	...	...	...	2,003	751	.....	.....	...	...	2,003	751
	Rubber (mds.) ...	...	7	313	.....	.....	.....	.....	...	...	7	313
	Total	...	7	313	5,284	7,313	.....	.....	58	116	5,349	7,742
Goálpára ...	Canes (bndls.) ...	...	...	...	100	1	.....	.....	...	...	100	1
	Lac-mahál ...	...	...	...	.....	22	.....	.....	...	...	.....	22
	Total	...	...	...	100	23	.....	.....	...	...	100	23
Kámrúp ...	Silkworm-trees ...	...	...	...	162	27	.....	.....	...	...	162	27
	Betel-creepers ...	...	...	...	2	2	.....	.....	...	...	2	2
	Elephant tusks (seers)...	...	...	...	23	195	.....	.....	...	...	23	195
	Canes (bundles) ...	...	...	...	2,000	15	.....	.....	...	...	2,000	15
	Thatching-grass (bundles)	...	...	...	.....	.....	2,700	10	...	...	2,700	10
	Total	...	...	...	2,187	239	2,700	10	...	...	4,887	249

FORM No. 55.—(*Concluded.*)

III.—DISTRICT FORESTS.—(*Concluded.*)

Division.	Description of produce.	Produce removed or utilised.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.		Rs.		Rs.
Darrang ...	Canes (bundles)	...	...	10,325	79	4,985	38	...	...	15,310	117
	Lac-mahál	...	...	.....	56	.....	.....	...	...	.....	56
	Rubber-mahál	...	...	.....	22,100	.....	.....	...	...	.....	22,100
	Total ...	...	...	10,325	22,235	4,985	38	...	...	15,310	22,273
Nowgong ...	Canes (bundles)	...	...	24,620	185	.....	.....	...	...	24,620	185
	Lac-mahál	...	...	.....	188	.....	.....	...	...	.....	188
	Rubber-mahál	...	...	.....	128	.....	.....	...	...	.....	128
	Other minor produce	...	...	.....	6	.....	.....	...	...	.....	6
	Total ...	...	...	24,620	507	.....	.....	...	...	24,620	507
Sibságar ...	Canes (bundles)	...	...	46,160	385	5,328	53	...	...	51,488	438
	Lac-mahal	...	...	.....	65	.....	.....	...	...	.....	65
	Total ...	...	...	46,160	450	5,328	53	...	...	51,488	503
Lakhimpur ...	Canes (bundles)	...	...	3,17,950	3,090	160	1	...	...	318,110	3,091
	Rubber-mahál	...	...	.....	7,000	.....	.....	...	...	.....	7,000
	Lac-mahál	...	...	.....	12	.....	.....	...	...	.....	12
	Total ...	...	...	3,17,950	10,102	160	1	...	...	318,110	10,103

Cachar	Agar (baskets)	...	...	47	71	.....	.....	...	...	47	71
	Canes (bundles)	...	...	3,549	222	667	42	...	...	4,216	264
	Sun-grass and reeds (cubic feet) ...	...	...	6,027	60	326	10	...	...	6,353	70
	Rubber-mahál	...	...	.....	1,000	.....	.....	...	...	.....	1,000
	Total ...	...	...	9,623	1,353	993	52	...	...	10,616	1,405
Sylhet	Agar (baskets)	...	...	8	11	.....	.....	...	...	8	11
	Canes (bundles)	...	...	819	51	9,997	625	...	...	10,816	676
	Grass and reeds	...	...	99,035	268	56,043	340	...	...	155,078	608
	Total ...	...	...	99,862	330	66,040	965	...	...	165,902	1,295
Khási and Jaintia Hills ...	Rubber-mahál	...	...	.....	350	.....	.....	...	...	.....	350
	Cassia ,, ...	...	...	.....	170	.....	.....	...	...	.....	170
	Fruits	...	...	.....	54	.....	.....	...	...	.....	54
	Other minor produce	...	...	.....	22	.....	.....	...	...	.....	22
	Total ...	...	...	.....	596	.....	.....	...		.....	596
	Total District Forests ...	7	313	516,111	43,148	80,206	1,119	58	116	596,382	44,696
	Grand Total	15	908	554,070	44,844	80,284	1,121	58	116	634,427	46,989

FORM No. 56.

FOREST DEPARTMENT, ASSAM.—ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS, OR SOLD LOCALLY, DURING THE YEAR 1885-86.

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
BALANCE AT COMMENCEMENT OF THE YEAR.				
GARO HILLS DIVISION—				
Scantlings of Sal timber	8	8	.....	.....
India-rubber ... ... Mds.	0-15-0	.....	3	8
KAMRUP DIVISION—				
Boats of reserved timber	7	.....	7	.....
Total balance	.....	.....	10	8
Received from the Forests in Depôts.				
Scantlings of Sal timber	21	34		
Planks of ditto	166	135		
Beam of ditto	1	3		
Logs of ditto	20	.....		
Drift and waif wood...	170	.....		
India-rubber ... ... Mds.	10-22-4	.....	378	172
Received from the forests and sold locally.				
Confiscated Sal-trees	4	.....		
Drift and confiscated reserved trees ...	34	.....		
Ditto ditto unreserved trees ...	171	.....		
Ditto ditto boats and dugouts ...	35	.....		
Posts	20	.....		
Oar	1	.....		
India-rubber ... ... Mds.	1-3-0	.....		
Charcoal ... ... ,,	40-0-0	.....		
Canes ... ... Bdls.	35	.....	265	.....
Total	.....	.....	653	180

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Removed by purchasers from Depôts.				
Logs of Sal timber	20	.....		
Drift and waif wood	170	.....		
India-rubber ... ... Mds.	10-17-4	.....	190	.....
Sold locally.				
Confiscated Sal-trees	4	.....		
Drift and confiscated reserved trees ...	34	.....		
Ditto ditto unreserved trees ...	171	.....		
Ditto ditto boats and dugouts.	35	.....		
Posts	20	.....		
Oar	1	.....		
India-rubber ... ... Mds.	1-3-0	.....		
Charcoal ... ... ,,	40-0-0	.....		
Canes ... ... Bdls.	35	.....	265	.....
Used by the Department.				
Scantlings of Sal timber	24	42		
Planks ditto	108	94		
Boats of reserved timber	7	.....	139	136
BALANCE AT CLOSE OF THE YEAR.				
GARO HILLS DIVISION—				
India rubber ... Mds.	0-20-0	.....		
Beams of Sal timber	1	3		
Planks	58	41	59	44
Total	.....	.....	653	180

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPOTS FOR THE YEAR 1885-86.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
	Number.	C. feet.	Value.	Number.	C. feet.	Value.	In favour of the year.	Against the year.
GÁRO HILLS DIVISION.			Rs.			Rs.	Rs.	Rs.
Scantlings ...	3	8	20	...	...	...	...	20
Beams ...	...	...	...	1	3	8	8	...
Planks ...	...	...	...	58	41	102	102	...
Rubber ...	15 seers	...	22	20 seers	...	25	3	...
Total ...	...	...	42	...	...	135	113	20
KÁMRÚP DIVISION.								
Boats ...	7	...	130	...	...	...	...	130
Total ...	...	...	130	...	...	...	...	130
Grand Total ...	...	...	172	...	...	135	113	150

Net difference against the year Rs. 37.

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1885-86.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
DIRECTION.		Rs.	Rs.	Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments ...	12	250	12	250	...	...
Tools ...	21	33	21	33	...	...
Office furniture ...	61	1,100	64	1,235	135	...
Tents ...	1	185	1	185	...	...
Miscellaneous ...	62	368	56	367	...	1
Buildings.						
Out-houses ...	4	150	6	220	70	...
Live Stock.						
Elephants ...	2	4,000	2	3,900	...	100
Total ...	...	6,086	...	6,190	205	101
GÁRO HILLS DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	45	419	121	669	250	...
Tools ...	5,864	526	321	423	...	103
Office furniture ...	20	900	23	973	73	...
Miscellaneous ...	...	507	...	1,071	564	...
Buildings.						
Tura bungalow ...	...	...	1	5,437	5,437	...
Tura godown ...	...	...	1	1,381	1,381	...
Damra inspection bungalow ...	...	...	1	512	512	...
Live Stock.						
Elephants ...	2	3,800	2	3,800	...	...
Bullocks ...	2	125	...	...	...	125
Total ...	...	6,277	...	14,266	8,217	228
GOÁLPÁRA DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	74	41	28	253	...	188
Tools ...	459	759	458	669	...	90
Office furniture ...	67	1,123	62	1,018	...	105
Tents ...	1	150	1	100	...	50
Miscellaneous ...	...	1,027	...	942	...	85

FORM No. 57.—(*Continued*).

Description of live and dead stock.	On hand at commencement of the year		On hand at close of the year.		Difference in value.	
	Number. or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
GOÁLPÁRA DIVISION.—(*Concluded*).		Rs.	Rs.	Rs.	Rs.	Rs.
Buildings.						
Dhubri bungalow ...	1	8,000	1	8,000	...	...
Other houses ...	27	1,240	27	1,082	...	158
Live Stock.						
Elephants	2	3,800	2	3,800	...	...
Bullocks	2	100	...	...	...	100
Total	...	16,640	...	15,864	...	776
KÁMRÚP DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	49	258	42	155	...	103
Tools ...	365	618	401	614	...	4
Office furniture ...	57	906	69	1,028	122	...
Tents ...	1	40	1	30	...	10
Miscellaneous ...	...	1,624	...	1,709	85	...
Buildings.						
Kulsi plantation bungalow ...	1	3,200	1	3,200	...	...
Gauháti bungalow ...	1	5,658	1	5,658	...	...
Other houses ...	60	988	81	1,088	100	...
Live Stock.						
Elephants ...	4	4,900	4	5,100	200	...
Bullocks ...	4	310	2	130	...	180
Total ...	...	18,502	...	18,712	507	297
DARRANG DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	38	335	16	235	.....	100
Tools ...	482	650	433	450	.....	200
Office furniture ...	96	800	73	675	.....	125
Tents ...	2	108	2	108	.....	.....
Miscellaneous ...	.....	538	.....	500	.....	38
Buildings.						
Bhairabi ghat bungalow and inspection houses ...	3	3,800	3	3,800	.....	.....
Other houses ...	40	600	16	400	.....	200
Live Stock.						
Elephants ...	3	3,600	2	2,800	.....	800
Total ...	.....	10,431	.....	8,968	.....	1,463
NOWGONG DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	.....	.....	15	124	124	.....
Tools ...	.....	.....	40	102	102	.....
Office furniture ...	.....	.....	25	505	505	.....
Tents ...	.....	.....	.....	.....	.....	.....
Miscellaneous ...	.....	.....	.....	170	170	.....
Buildings.						
Inspection house ...	.....	.....	2	180	180	.....
Other houses ...	.....	.....	8	241	241	.....
Live Stock.						
Elephant ...	.....	.....	1	1,000	1,000	.....
Total ...	.....	.....	.....	2,322	2,322	.....
SIBSAGAR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	29	90	24	59	.....	31
Tools ...	467	695	480	695	.....	.....
Office furniture ...	45	566	44	566	.....	.....
Tents ...	2	65	2	15	.....	50
Miscellaneous ...	.....	544	.....	690	146	.....
Buildings.						
Sibságar bungalow ...	1	5,000	1	5,000	.....	.....
Golághát ditto and inspection houses...	5	4,800	5	4,800	.....	.....
Other houses ...	15	400	15	400	.....	.....

FORM 57.—(*Concluded*).

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
SIBSÁGAR DIVISION.—(*Concluded.*)		Rs.		Rs.	Rs.	Rs.
Live Stock.						
Elephants ...	2	2,300	3	3,800	1,500	.....
Bullocks ...	2	120	2	120	.....	.....
Total ...	.....	14,580	.....	16,145	1,646	81
LAKHIMPUR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	52	659	46	599	.....	60
Tools ...	198	408	187	393	.....	15
Office furniture ...	45	524	60	736	212	.....
Tents ...	5	626	1	226	.....	400
Miscellaneous ...	.....	894	.....	668	.....	226
Buildings.						
Lakhimpur bungalow ...	1	8,510	1	8,510	.....	.....
Other houses ...	21	1,810	25	1,886	76	.....
Live Stock.						
Elephants ...	3	5,000	2	3,000	.....	2,000
Total ...	.....	18,431	.....	16,018	288	2,701
CACHAR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	30	605	14	376	.....	229
Tools ...	273	627	269	562	.....	65
Office furniture ...	106	1,201	102	1,205	4	.....
Tents ...	1	70	1	50	.....	20
Miscellaneous ...	.....	842	.....	686	.....	156
BUILDINGS.						
Divisional and Office Bungalows.						
Revenue stations and inspection houses ...	8	9,575	8	9,575	.....	.....
Other houses ...	38	1,596	42	1,611	15	.....
Live Stock.						
Elephant ...	1	600	1	600	.....	.....
Total ...	.....	15,116	.....	14,665	19	470
SYLHET DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	1	5	40	153	148	.....
Tools ...	8	40	7	30	.....	10
Office furniture ...	.....	.....	26	367	367	.....
Tents ...	.....	.....	.....	.....	.....	.....
Miscellaneous ...	.....	30	.....	58	28	.....
Buildings.						
Office and rest-houses ...	.....	.....	3	170	170	.....
Other houses ...	6	220	12	245	25	.....
Total ...	.....	295	.....	1,023	738	10
KHÁSI AND JAINTIA HILLS DIVISION.						
Stores, Tools and Plant.						
Tools ...	81	121	69	76	.....	45
Miscellaneous ...	.....	16	.....	16	.....	.....
Buildings.						
Small houses ...	4	330	4	330	.....	.....
Total ...	.....	7	.....	422	.....	45
Total	.....	1,06,825	.....	1,14,595	13,942	6,172

Net difference in favour to the year Rs. 7,770

FORM No. 58.

FOREST DEPARTMENT, ASSAM.—SUMMARY OF REVENUE AND EXPENDITURE OF THE DIFFERENT DIVISIONS, 1885-86.

Budget heads	Direction.	Gáro Hills Division.	Goálpára Division.	Kámrúp Division.	Darrang Division.	Nowgong Division.	Sibságar Division.	Lakhimpur Division.	Cachar Division.	Sylhet Division.	Khási and Jaintia Hills Division.	Nága Hills Division.	Total.
RECEIPTS.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency—													
a. Timber	.....	34 0 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34 0 0
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	308 3 0	.....	69 14 0	153 12 0	.....	.....	.....	.....	.....	.....	.....	661 13 0
II.—Timber and other produce removed from the forests by consumers or purchasers.	.....	8,825 10 6	.....	.....	.....	.....	.....	.....	2,994 4 0	4,021 0 0	.....	.....	15,850 14 6
a. Timber	.....	7,653 4 0	15,860 15 0	20,717 3 0	10,762 14 1	697 12 0	17,742 15 2	6,804 13 0	26,422 13 0	9,152 13 3	2,259 2 9	4 0 0	1,17,978 9 3
b. Firewood and charcoal	.....	.....	27 1 0	50 4 0	123 0 0	88 6 0	908 8 0	723 4 0	91 15 6	13 5 6	.....	.....	2,025 12 0
c. Bamboos	.....	.....	.....	5 6 3	450 10 0	60 15 6	17 4 0	25 6 3	1,592 8 3	805 8 0	.....	.....	2,957 10 3
d. Grazing and fodder grass	.....	56 4 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55 4 0
e. Other minor produce	.....	.....	123 1 6	278 15 3	22,754 11 0	209 9 2	564 2 0	9,780 4 0	3,344 4 0	2,712 6 10	602 12 9	.....	40,880 11 6
III.—Drift and waif wood and confiscated forest produce	.....	261 6 0	14 9 0	259 0 6	177 7 0	.....	196 10 0	75 12 0	501 14 3	30 0 0	.....	.....	1,318 10 9
IV.—Revenue from forests not managed by Government—													
a. Duty on foreign timber and other forest produce	.....	.....	24 0 0	.....	.....	.....	.....	.....	5,252 13 6	.....	.....	.....	5,276 13 6
b. Revenue from shared and private forests	.....	682 9 3	.....	.....	.....	.....	.....	.....	.....	.....	4,311 10 0	.....	4,994 3 3
V.—Miscellaneous—													
a. Fines and forfeitures	.....	765 12 0	560 0 0	287 0 0	25 0 0	.....	187 3 0	10 0 0	87 0 0	114 13 0	.....	.....	2,036 12 0
b. Refunds	10 4 0	15 15 1	0 5 8	0 4 3	.....	.....	43 13 8	29 11 4	1 1 0	50 0 0	.....	.....	161 7 0
c. Other sources	1 8 6	201 4 6	313 3 3	594 8 3	100 0 0	.....	574 9 0	603 3 0	594 12 11	237 1 6	38 1 0	.....	3,058 2 11
Total Receipts	11 12 0	18,813 3 10	16,923 3 5	22,262 7 6	34,577 6 1	955 8 8	20,025 0 10	18,062 5 7	40,683 6 5	17,137 0 1	7,211 10 6	4 0 0	1,98,656 11 11
EXPENDITURE.													
A.—CONSERVANCY AND WORKS.													
I.—Timber and other produce removed from the forests by Government agency—													
a. Timber	.....	984 0 3	.....	.....	1 0 0	.....	88 0 0	70 2 0	.....	.....	.....	.....	1,143 2 3
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	145 8 0	.....	28 10 9	221 4 0	.....	.....	.....	.....	.....	.....	.....	395 6 9
II.—Timber and other produce removed from the forests by consumers or purchasers.	.....	2,087 1 3	42 15 6	1,056 15 0	213 9 8	42 3 0	132 1 5	2,082 5 8	646 2 11	292 2 3	.....	.....	6,595 8 8
III.—Drift and waif wood and confiscated forest produce	.....	4 11 0	.....	2 0 0	.....	.....	55 0 0	1 8 0	.....	.....	.....	.....	63 3 0
IV.—Revenue from forests not managed by Government—													
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—Rent of leased forests, and payments to shareholders in forests managed by Government.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VI.—Live stock, stores, tools and plant—													
a. Purchase of cattle	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Feed and keep of cattle	534 4 0	1,284 8 9	900 6 9	1,788 13 6	1,100 1 7	94 8 0	1,281 5 0	1,428 5 3	230 3 3	.....	.....	.....	8,722 9 1
c. Purchase of stores, tools and plant	135 3 0	289 0 6	114 1 8	494 8 1	109 2 0	446 8 0	34 0 0	337 7 0	110 4 6	432 4 0	21 8 0	.....	2,574 3 9

VII.—Communications and buildings—													
a. Roads and bridges	.....	16,866 8 6	.....	552 2 10	496 2 9	.....	270 8 0	.....	652 4 0	.....	.....	.....	18,837 7 7
b. Buildings	38 0 0	2,798 9 11	659 0 4	1,269 12 6	180 12 6	241 10 0	212 9 0	1,005 2 5	1,428 9 8	238 19 0	.....	.....	8,152 12 2
c. Other works	.....	28 8 0	.....	.....	194 15 0	.....	.....	40 12 0	195 9 6	.....	.....	.....	459 12 6
VIII.—Demarcation, improvement, and extension of forests—													
a. Demarcation	.....	847 1 3	485 15 8	393 12 0	849 5 0	266 9 6	548 0 0	4,160 11 11	1,466 5 5	.....	.....	.....	9,017 12 4
b. Compensation for land and rights	.....	.....	301 7 4	.....	.....	.....	.....	11 11 8	37 5 0	.....	.....	.....	350 8 0
c. Surveys and working plans	288 10 0	1,239 0 6	52 8 0	320 5 6	2,096 11 0	240 0 0	397 0 0	1,814 7 2	382 4 0	.....	.....	.....	6,333 14 2
d. Sowing and planting	.....	116 13 3	.....	1,844 12 3	4,014 4 9	.....	.....	.....	.....	.....	523 4 0	.....	6,499 2 3
e. Protection from fire	.....	.....	3,884 2 11	2,844 13 6	757 13 7	224 6 6	.....	.....	.....	.....	1,134 8 4	.....	8,845 12 10
f. Other works	346 0 0	84 0 0	569 8 0	804 3 10	303 4 0	20 0 0	1,639 1 10	686 14 4	1,120 1 6	2,164 0 3	218 1 0	.....	7,955 2 9
IX.—Miscellaneous—													
a. Refunds	.....	.....	.....	.....	220 8 0	.....	2 9 3	276 0 0	2 0 0	.....	.....	.....	501 1 3
b. Low charges	.....	1 8 9	421 8 6	16 0 0	.....	.....	.....	363 3 5	120 6 0	60 0 0	.....	.....	982 10 11
c. Other charges	170 5 9	540 8 3	569 9 3	657 6 9	212 6 3	46 13 0	231 7 3	597 5 7	463 15 3	165 1 0	.....	.....	3,654 14 4
Total, A.—Conservancy and Works	1,572 11 9	28,297 5 8	7,902 3 6	12,074 4 6	10,973 4 1	1,622 10 0	4,891 9 9	12,926 0 8	6,955 6 10	13,372 1 6	1,897 5 4	.....	92,484 15 7
B.—ESTABLISHMENTS.													
I.—Salaries—													
a. Conservators	15,000 0 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000 0 0
b. Superior officers	480 11 5	5,528 9 1	3,050 0 0	7,967 9 9	10,050 0 0	450 0 0	4,550 0 0	3,850 0 0	3,000 0 0	1,410 0 0	.....	.....	40,816 14 3
c. Subordinate forest and depôt establishments	.....	3,428 3 9	3,426 0 6	3,966 12 0	3,384 3 7	250 8 0	3,738 3 0	2,979 5 8	3,989 5 6	216 2 1	1,454 5 4	.....	27,361 1 5
d. Office establishments	4,827 7 6	932 10 6	1,008 0 0	987 6 6	917 1 0	67 0 0	1,004 13 11	1,005 0 8	981 13 4	35 6 9	.....	.....	11,766 12 2
e. Deputation and special allowances	.....	1,314 13 2	219 2 3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,533 15 5
II.—Travelling allowances—													
a. Conservators	2,024 7 8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,024 7 8
b. Superior officers	374 13 0	1,549 8 6	1,479 8 3	1,041 8 0	2,536 12 6	274 0 0	996 2 0	2,746 6 7	851 2 0	150 8 0	.....	.....	12,000 5 4
c. Subordinate forest and depôt establishments	135 12 9	416 13 0	512 12 0	488 14 0	721 6 0	84 0 0	767 0 0	563 6 0	424 9 6	40 10 0	.....	.....	3,976 3 3
d. Office establishments	10 4 0	103 10 6	.....	.....	36 8 0	4 0 0	22 8 0	.....	.....	.....	.....	.....	176 14 6
III.—Contingencies—													
a. Stationery	.....	1 0 0	0 12 0	1 8 0	0 8 0	.....	2 2 0	0 12 0	5 12 0	.....	.....	.....	12 6 0
b. Carriage of tents and records	.....	32 4 0	24 8 3	.....	20 0 0	1 0 0	1 0 0	17 14 0	23 2 0	0 12 0	.....	.....	130 8 3
c. Rents, rates, and taxes	260 0 0	.....	24 0 0	84 6 0	.....	.....	4 0 0	36 0 0	.....	.....	.....	.....	508 6 0
d. Pay of police guards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Official postage	371 11 6	149 8 0	49 6 0	160 9 6	160 12 0	16 8 0	161 11 0	242 10 6	225 8 0	45 9 0	.....	.....	1,573 13 6
f. Sundries	450 0 9	695 14 3	270 0 2	234 14 3	130 4 6	2 4 0	118 8 7	399 12 3	305 7 0	57 6 0	3 9 0	.....	2,737 0 9
Total B. Establishments	24,015 4 7	14,150 14 9	9,865 1 11	14,993 8 0	18,466 7 7	1,129 4 0	11,376 0 0	11,841 3 8	9,756 11 4	1,956 5 10	1,457 14 4	.....	1,19,008 12 6
Grand Total of Expenditure	25,588 0 4	42,448 4 5	17,767 5 5	27,067 12 6	29,439 11 8	2,751 14 0	16,267 10 3	24,767 4 4	16,712 2 2	5,328 7 4	3,355 3 8	.....	2,11,493 12 1

CALCUTTA:
The 5th July 1886.

JAMES TAYLOR,
Assistant-Comptroller-General (Forests).

FORM No. 59.

Dr. FOREST DEPARTMENT, ASSAM.—ACCOUNT CURRENT FOR THE YEAR 1885-86. *Cr.*

	Rs As. P	Rs. As P		Rs As. P.	Rs As. P.
To Cash Balance	.....	1,240 12 6	By expenditure as per Annual Summary	.....	2,11,493 12 1
„ Revenue as per Annual Summary Form No. 58.	.....	1,96,656 11 11	Deposits	.....	2 0 0
„ Service funds— Uncovenanted Service Family Pension Fund, Bengal.	.....	816 8 4	„ Forest Cash Remittances, Local— Remittances to treasuries	1,89,453 7 0	.....
„ Deposits	.....	2 0 0	Inter divisional transfers	1,295 7 1	1,90,748 14 1
„ Forest Cash Remittance, Local— Forest cheques drawn	1,97,033 5 7	.....	„ Advances recoverable	.....	72,193 5 3
Inter-divisional transfers	1,295 7 1	1,98,328 12 8	„ Suspense	.....	1 6 0
„ Advances recoverable	.....	81,741 15 5	„ Inter-departmental transfers— Public Works Department (State Railways.)	439 0 0	.....
„ Suspense	.....	1 6 0	Ditto (other branches)	4 651 14 8	.....
„ Account Current (other Governments)— Government of India	1,723 12 0	.....	Civil Department— Mathematical Instrument Department.	0 8 0	.....
Government of Bengal	185 0 0	2,208 12 0	Jail	34 3 6	.....
„ Inter-departmental transfers— Public Works Department (other branches.)	23 11 1	.....	Survey	4 6 0	.....
Civil Department— Mathematical Instrument Department.	343 3 0	.....	Police	220 8 0	.....
Jails	397 10 0	.....	Miscellaneous	550 0 0	.....
Survey	4 6 0	.....	Military Department, Bengal	300 8 0	.....
Police	220 8 0	989 6 1	Telegraph Department	1,165 0 0	7,366 0 2
			„ Cash balance	.....	181 0 4
Total	.....	4,81,986 5 11	Total	.....	4,81,986 5 11

CALCUTTA:
The 5th July 1886.

JAS. TAYLOR,
Assistant-Comptroller-General (Forests).

FORM No. 60.

FOREST DEPARTMENT, ASSAM.—REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1885-86.

Division	Particulars	Outstandings at commencement of year.	Value of sales and other revenue during year	Total.	Amount realised during year.	Balance due to the Department at end of year.
		Rs As P	Rs As. P	Rs. As. P.	Rs As. P.	Rs. As. P.
Direction	Price of timber and other produce, &c.	....	11 12 0	11 12 0	11 12 0	.....
Garo Hills	Ditto ditto	2,975 0 0	17,212 15 10	20,187 15 10	18,813 3 10	1,374 12 0
Goálpára	Ditto ditto	11,157 0 9	9,001 11 5	20,158 11 5	16,923 3 5	3,235 8 0
Kamrúp	Ditto ditto	3,852 0 0	20,754 7 6	24 606 7 6	22,262 7 6	2,344 0 0
Darráng	Ditto ditto	987 2 7	37,343 3 3	38,330 5 10	34,577 6 1	3,752 15 9
Nowgong	Ditto ditto	.....	1,062 7 8	1,062 7 8	955 3 8	107 4 0
Sibságar	Ditto ditto	104 0 0	20,160 0 10	20,264 0 10	20,025 0 10	239 0 0
Lakhimpur	Ditto ditto	.....	19,682 5 7	19,682 5 7	18,052 5 7	1,630 0 0
Cachar	Ditto ditto	7,114 6 6	37,334 14 3	44,449 4 9	42,411 0 3	2,038 4 6
Sylhet	Ditto ditto	487 8 0	16,649 8 1	17,137 0 1	17,137 0 1	.. ...
Khá-i and Jaintia Hills	Ditto ditto	190 0 0	7,021 10 6	7,211 10 6	7,211 10 6	.....
Naga Hills	Ditto ditto	.....	4 0 0	4 0 0	4 0 0	.....
	Total	26,867 1 1	1,86,239 0 11	2,13,106 2 0	1,98,384 5 9*	14,721 12 3

			Rs As P.
* Realisation as per Form No. 53	..	..	1,96,656 11 11
Reductions allowed	..	..	1,727 9 10
			1,98,384 5 9

FORM No. 61.

FOREST DEPARTMENT, ASSAM.—OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1885-86.

Division.	Department Debtor			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year	At commencement of year.	Payments made during year	At close of year	To Department (Outstandings).	By Department (Liabilities)
	Rs. As. P.	Rs. As. P.	Rs. As P	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Direction	....	516 10 8	516 10 8	310 0 0	546 10 8	856 10 8	340 0 0	....
Garo Hills division	....	25,922 15 11	25,922 15 11	5,297 9 4	21,561 9 6	26,859 2 10	966 13 1	30 10 2
Goálpára do.	....	10,992 8 5	10,992 8 5	149 8 0	11,036 14 6	11,186 6 6	193 14 1	....
Kamrup do.	..	13,431 6 0	13,431 6 0	728 1 3	13,178 1 6	13 906 2 9	474 12 9	..
Darrang do.	..	7,750 1 1	7,750 1 1	593 10 4	7,387 8 1	7,981 2 5	231 1 4	....
Nowgong do.	..	740 11 0	740 11 0	.....	937 8 1	937 8 1	196 13 1	...
Sibságar do.	160 14 1	3,484 12 9	3,634 10 10	421 3 0	3,714 5 1	4,135 8 1	480 13 3	....
Lakhimpur do.	...	15,104 15 5	15,104 15 5	6,072 5 7	10,670 0 10	16,742 6 5	1,660 6 8	22 15 8
Cachar do.	....	3,285 10 11	3,285 10 11	1,059 9 2	2,494 13 9	3,554 6 11	268 12 0	....
Sylhet do.	....	512 3 3	512 3 3	..... .	665 13 3	665 13 3	152 10 0	....
Khási and Jaintia Hills division.	....	.....	.....	.....	..... .	.....	.....	....
Naga Hills division	....	. .....	.....	..... .	.....	....	.....	. .
Total	160 14 1	81,741 15 5	81,911 13 6	14,631 14 8	72,193 5 3	86,825 3 11	4,967 0 3	53 9 10

CALCUTTA:
The 5th July 1886.

JAS. TAYLOR,
Assistant-Comptroller-General (Forests.)

FORM No. 62.

FOREST DEPARTMENT, ASSAM.—FINANCIAL RESULTS OF THE YEAR 1885-86.

Division.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction	.....	.....	12	12,345	13,243	12	25,588
Gáro Hills	603	1,134	18,210	10,093	31,221	18,813	42,448
Goálpára	14	.....	16,909	6,220	11,547	16,923	17,767
Kámrúp	329	31	21,934	9,798	17,239	22,263	27,068
Darrang	361	222	34,216	10,182	19,036	34,577	29,440
Nowgong	.....	.....	955	789	1,963	955	2,752
Sibságar	197	143	19,828	6,383	9,742	20,025	16,268
Lakhimpur	76	72	17,976	9,693	15,002	18,052	24,767
Cachar	302	.....	40,382	6,221	10,491	40,684	16,712
Sylhet	30	.....	17,107	1,604	3,725	17,137	5,329
Khási and Jaintia Hills	.....	.....	7,212	734	2,621	7,212	3,355
Nága Hills	.....	.....	4	.....	.....	4	.....
Total	1,912	1,602	1,94,745	74,062	1,35,830	1,96,657	2,11,494

SHILLONG :
The 6th June 1886.

GUSTAV MANN,
Conservator of Forests, Assam.

Appendix I.

Register of Reserved Forests in the Province of Assam added during 1885-86.

GARO HILLS FOREST DIVISION.

GÁRO HILLS DISTRICT.

Date of entry.	Name of reserve.	Civil district and sub-division of district.	Number and date of notification sanctioning the reserve.	Area in acres.	Boundaries.	Statements of rights.	Remarks.
1st November 1885.	Songsak	Gáro Hills ...	No. 29, dated 1st October 1885.	9,280	East.—Up the Thasakjhora, from the point where it enters the Rengrhi river to its source. South.—A straight line from mound No. 1 at the source of the Thasakjhora, to mound No. 2 at the source of the Okodayjhora, then down the Okodayjhora to its junction with the Chalamjhora, then down the Chalamjhora, past the lands of Bomgiri and Dimbil, to the point where the Rerimiljhora enters it. West.—Up the Rerimiljhora from the point where it enters the Chalam to its source, at which point also the Ulukhatokijhora, flowing in an opposite direction, also has its source. Then from this point down the Ulukhatokijhora to where it enters the Rengrhi river. North.—Up the Rengrhi river from the point where the Ulukhatokijhora joins it to the point where the Thasakjhora joins it.	.....	Notified under Section 19 of the Indian Forest Act of 187.
					KAMRÚP DIVISION. KÁMRÚP DISTRICT. *Block I.*		
1st November 1885.	Chhaygaon....	Kamrúp	No. 25, dated 25th September 1885.	2,705	West.—Along the edge of Saru Juli and foot of Mairasali Hill, in a northerly direction to boundary-pillar No. 10, on the cultivation of Jungrabhitha, skirting the latter and the sál forest land, first in an easterly and then in a northerly direction, to boundary-pillar No. 16, on Nijrakona Garang, down this and skirting the cultivation of Jungrabhitha, Dhoniagaon, and Barialpara, first in a westerly and then in a northerly direction to boundary-pillar No. 25, at Gasanithan, then along foot of Manuhpuri and Murkha Dhubhi hills to boundary-pillar No. 31, east of Bhipara deserted village site. North and East.—From boundary-pillar No. 31, along path to boundary-pillar No. 32, on the cultivation of Kharpokhal village, and skirting this and the sál forest land, and along a *bil* to the Milmillia reserve boundary, at boundary-pillar No. 21, along the latter to the cultivation of Patgaon village and Anguri tea-garden, and thence the boundary of the latter and along foot of hills, first in an easterly and then in a southerly direction to boundary-pillar No. 92 on the Chhaygáon and Pantan manza boundary. South.—From the boundary-pillar No. 92, on the northern extremity of the additional Pantan reserve up the stream which forms the boundary between Chhaygaon and Pantan manzas, to a boundary-post No. 1, where a feeder joins it. Up this stream to boundary-pillar No. 2 on the watershed and down another called Nijrakana Garang to boundary-pillar No. 3 thence up another stream to boundary-pillar No. 4 on Jaldhabura Hill and down a feeder of Karpeng Danga to the latter at boundary-pillar No. 5, and down this to boundary-pillar No. 6. *Talimara Hill.—Block II.* West.—From boundary-pillar No. 31 on path to Kharpakhal village along foot of Siliputa Latakana and Talimara hills in a northerly direction to a boundary-pillar No. 5 north of Khatira village. North and East.—From this boundary-pillar skirting the sál forest in an easterly direction along foot of Talimara hills to the cultivation of Mainapara, and along this and edge of sál forest in an easterly direction to boundary-pillar No. 24, Milmillia, on road, and Milmillia reserve boundary, then along the latter to boundary-post No. 23 on the Kharpakhal Juli. South.—The cultivation of Kharpakhal village and the boundary of Block I. to boundary-pillar No. 31. *Khatira.—Block III.* West and North.—Along foot of Marughar hill and cultivation of Khatira in a northerly direction to the Ahomchoki Juli and round this to boundary-pillar No. 12 of Milmillia reserve Akchalia block and the boundary of the latter south-east to the cultivation of Mainapara. East and South.—From boundary-pillar No. 10 on the cultivation of Mainapara along the latter and sál forest, first in a southerly and then in a westerly direction to Marughar hill and boundary-pillar No. 9 near Khatira village.	.....	Ditto ditto.

Appendix II.

STATEMENT SHOWING THE CLEARING OF BOUNDARY-LINES AND REPAIRING OF BOUNDARY-MOUNDS, AND THE INSPECTION DONE BY THE DIVISIONAL OFFICER IN EACH RESERVED AND PROTECTED FOREST DURING THE YEAR 1885-86.

Names of divisions and forests.	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1885-86.		Length of artificial boundaries and demarcated natural boundaries not cleared in 1885-86.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1885-86.	Total number of boundary-marks not repaired in 1885-86.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.		Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
GÁRO HILLS DIVISION.													
Dibru Hill reserve	7	10	7	10	.....	.....	9	9	.....	2	10	5	.....
Jinari "	13	68	13	68	.....	.....	5	5	.....	13	68	.....	.....
Chima and Bangshi "	15	61	15	61	.....	.....	30	30	.....	15	61	.....	.....
Dhima "	13	62	13	62	.....	.....	18	18	.....	13	62	.....	.....
Dilma "	4	12	4	12	.....	.....	10	10	.....	4	12	.....	.....
Raja Simla "	5	69	5	69	.....	.....	5	5	.....	5	69	.....	.....
Ildek "	8	9	8	9	.....	.....	10	10	.....	8	9	.....	.....
Dambu "	13	20	13	20	.....	.....	15	15	.....	13	20	.....	.....
Darugiri "	12	72	12	72	.....	.....	16	16	.....	12	72	.....	.....
Emangiri "	4	5	4	5	.....	.....	11	11	.....	.....	.....	4	5
Reywak "	3	55	3	55	.....	.....	6	6	.....	.....	.....	3	55
Siju "	2	22	2	22	.....	.....	6	6	.....	.....	.....	2	22
Tura "	1	15	1	15	.....	.....	7	7	.....	1	15	.....	.....
Bolsalgiri "	2	32	2	32	.....	.....	9	9	.....	2	32	.....	.....
Songsak "	8	23	8	23	.....	.....	2	2	.....	8	23	.....	.....
Total	116	55	116	55	.....	.....	159	159	.....	101	53	15	2
GOÁLPÁRA DIVISION.													
Bijni Duár reserve	13	60	13	60	.....	.....	52	52	.....	.....	.....	13	60
Chirangduár reserve (eastern part) ...	7	55	7	55	.....	.....	29	29	.....	7	55	.....	.....
" " (western part) ...	5	35	5	35	.....	.....	26	26	.....	5	35	.....	.....

Appendix II.—(*Continued.*)

STATEMENT SHOWING THE CLEARING OF BOUNDARY-LINES AND REPAIRING OF BOUNDARY-MOUNDS, AND THE INSPECTION DONE BY THE DIVISIONAL OFFICER IN EACH RESERVED AND PROTECTED FOREST DURING THE YEAR 1885-86.

Names of divisions and forests.	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1885-86.		Length of artificial boundaries and demarcated natural boundaries not cleared in 1885-86.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1885-86.	Total number of boundary-marks not repaired in 1885-86.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.		Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
GOÁLPÁRA DIVISION.—(*Continued.*)													
Ripudnár reserve	5	.....	5	.....	.....	.....	19	19	.....	5	.....	.....	.....
Gumaduár "	6	.....	6	.....	.....	.....	38	38	.....	6	.....	.....	.....
Sidli "	27	.....	27	.....	.....	.....	143	67	76	27	.....	.....	.....
Panbari and Pechadaveri Reserve ...	8	10	8	10	.....	.....	40	40	.....	8	10	.....	.....
Bengtol and Darogaon "	3	60	3	60	.....	.....	17	17	.....	3	60	.....	.....
Bhumeswar Hill "	11	10	11	10	.....	.....	57	57	.....	11	10	.....	.....
Total	87	70	87	70	.....	.....	421	345	76	74	10	13	60
KÁMRÚP DIVISION.													
Barduar reserve	55	62	53	72	1	70	197	197	.....	51	52	4	10
Pantan "	55	5	55	5	.....	.....	134	134	.....	38	5	17	.....
Kulsi plantation reserve	16	5	16	5	.....	.....	37	37	.....	16	5	.....	.....
Milmillia "	24	35	24	35	.....	.....	124	124	.....	24	35	.....	.....
Mayang "	27	20	27	20	.....	.....	148	148	.....	25	60	1	40
Chhaygaon "	17	2	17	2	.....	.....	83	83	.....	17	2	.....	.....
Kukurmara depôt	1	8	1	8	.....	.....	12	12	.....	.....	.....	1	8
Jara reserve	6	20	6	20	.....	.....	28	28	.....	6	20	.....	.....
Kawasing reserve	16	8	16	8	.....	.....	72	72	.....	16	8	.....	.....
Rani "	35	.....	35	.....	.....	.....	143	143	.....	35	.....	.....	.....
Mataikhar "	14	47	14	47	.....	.....	63	63	.....	9	12	5	35
Hajo "	2	64	2	64	.....	.....	19	19	.....	2	64	.....	.....

Simla Hill " ...	...	...	4	50	4	50	.....	.....	23	23	.....	4	50	.....	.....
Dumpara " ...	...	...	5	60	5	60	.....	.....	34	34	.....	5	60	.....	.....
Khaksi Sikrabura Hill reserve	...	...	18	.....	18	.....	.....	.....	140	140	.....	18	.....	.....	.....
Ghoraputa "	...	...	3	30	3	30	.....	.....	26	26	.....	3	30	.....	.....
Khatkhati "	...	...	8	60	8	60	.....	.....	53	53	.....	8	60	.....	.....
Tareibari "	...	...	7	.....	7	.....	.....	.....	50	50	.....	7	.....	.....	.....
Garubaldha "	...	...	3	30	3	30	.....	.....	22	22	.....	3	30	.....	.....
Khurkhuri "	...	...	2	40	2	40	.....	.....	20	20	.....	2	40	.....	.....
Sursuria Hill "	...	...	6	.....	6	.....	.....	.....	29	29	.....	6	.....	.....	.....
Gizang "	...	...	5	.....	5	.....	.....	.....	35	35	.....	2	20	2	60
Jaipur "	...	...	7	21	7	21	.....	.....	48	48	.....	7	21	.....	.....
Baradobha "	...	...	7	20	7	20	.....	.....	46	46	.....	7	20	.....	.....
Nampathar "	...	...	5	60	5	60	.....	.....	30	30	.....	5	60	.....	.....
Barjuli "	...	...	9	.....	9	.....	.....	.....	45	45	.....	9	.....	.....	.....
Jharikhuri protected forest	...	...	8	65	8	65	.....	.....	55	55	.....	8	65	.....	.....
Buragohain " "	...	...	4	47	4	47	.....	.....	30	30	.....	4	47	.....	.....
Mogakhal " "	...	...	1	68	1	68	.....	.....	14	14	.....	1	68	.....	.....
Total	...	...	380	27	378	37	1	70	1,760	1,760	.....	348	34	31	73
DARRANG DIVISION.															
Balipara reserve	...	...	2	40	2	40	.....	.....	49	49	.....	2	40	.....	.....
Charduar plantation reserve	...	...	17	10	5	.....	12	10	.....	.....	.....	8	.....	9	10
Khalingduar ditto	...	...	8	.....	8	.....	...	.....	104	104	.....	8	.....	.....	.....
Singri Hill ditto	...	...	.....	29	.....	29	.....	.....	5	5	.....	.....	29	.....	.....
Garumari ditto	...	...	1	65	1	65	.....	.....	39	39	.....	1	65	.....	.....
Total	...	...	29	64	17	54	12	10	197	197	.....	20	54	9	10
NOWGONG DIVISION.															
Kholahat reserve	...	...	7	38	7	38	.....	.....	160	160	.....	7	38	.....	.....
Deboka ditto	...	...	6	38	6	38	.....	.....	22	22	.....	6	38	.....	.....
Diju ditto	...	...	11	60	11	60	.....	.....	262	122	140	11	60	.....	.....
Proposed Diju ditto	...	...	13	25	13	25	.....	.....	19	19	.....	13	25	.....	.....
Ditto Bamoni ditto	...	...	6	23	6	23	.....	.....	4	4	.....	6	23	.....	.....
Ditto Suang ditto	...	...	6	53	6	53	.....	.....	10	10	.....	6	53	.....	.....
Ditto Deboka ditto	...	...	4	24	4	24	.....	.....	6	6	.....	4	24	.....	.....
Total	...	...	56	21	56	21	.....	.....	483	343	140	56	21	.....	.....

Appendix II.—(*Concluded.*)

STATEMENT SHOWING THE CLEARING OF BOUNDARY-LINES AND REPAIRING OF BOUNDARY-MOUNDS AND THE INSPECTION DONE BY THE DIVISIONAL OFFICER IN EACH RESERVED AND PROTECTED FOREST DURING THE YEAR 1885-86.

Names of divisions and forests.	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1885-86.		Length of artificial boundaries and demarcated natural boundaries not cleared in 1885-86.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1885-86.	Total number of boundary-marks not repaired in 1885-86.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.		Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
SIBSÁGAR DIVISION.													
Mikir Hill reserve	35	.....	35	.....	.....	.....	25	.....	25	35	.....	.....	.....
Holongapar ditto	11	60	11	60	.....	.....	25	.....	25	11	60	.....	.....
Derai ditto	17	45	17	45	.....	.....	43	.....	43	17	45	.....	.....
Abhaypur ditto	18	20	6	40	11	60	34	.....	34	6	40	11	60
Upper Daigurung reserve	6	.....	6	.....	.....	.....	7	7	.....	6	.....	.....	.....
Lower ditto ditto	4	40	4	40	.....	.....	9	9	.....	4	40	.....	.....
Sola ditto	8	40	8	40	.....	.....	66	.....	66	8	40	.....	.....
Desai ditto	12	40	12	40	.....	.....	21	.....	21	12	40	.....	.....
Total	114	5	102	25	11	60	230	16	214	102	25	11	60
LAKHIMPUR DIVISION.													
Parapara protected forest ...	8	.....	8	.....	.....	.....	77	77	.....	8	.....	.....	.....
Upper Dehing " ...	50	.....	50	.....	.....	.....	432	181	251	43	.....	7	.....
Dehingmukh " ...	2	40	2	40	.....	.....	1	1	.....	2	40	.....	.....
Jokai " ...	11	.....	11	.....	.....	.....	182	182	.....	11	.....	.....	.....
Jaipur " ...	16	55	11	11	5	44	269	.....	269	9	51	7	4
Kuddum " ...	3	30	3	30	.....	.....	46	36	10	3	30	.....	.....
Bhorolwa " ...	1	30	1	30	.....	.....	16	16	.....	1	30	.....	.....
Railway concession ...	41	.....	41	.....	.....	.....	53	53	.....	27	.....	14	.....
Total ...	133	75	128	31	5	44	1,076	546	530	105	71	28	4

CACHAR DIVISION.														
Upper Jiri reserve	...	8	30	8	30	.....	.....	72	72	.....	8	30	.....	.....
Lower Jiri "	...	3	32	3	32	.....	.....	36	36	.....	3	32	.....	.....
Barak "	...	15	13	15	13	.....	.....	161	161	.....	15	13	.....	.....
Sonai "	...	10	59	10	59	.....	.....	75	75	.....	10	59	.....	.....
Katakhal "	...	17	29	17	29	.....	.....	204	204	.....	17	29	.....	.....
Dhaleswari "	...	10	46	10	46	.....	.....	66	66	.....	10	46	.....	.....
Inner Line "	...	1	10	1	10	.....	.....	10	10	.....	1	10	.....	.....
Mupa Mahur protected forest	...	.....	73	.....	55	.....	18	.....	.....	.....	.....	.....	.....	73
Langting Mupa "	...	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....
Total	...	68	52	67	34	1	18	624	624	.....	66	59	1	73
Grand Total	...	987	49	955	7	32	42	4,950	3,990	960	876	7	111	42

Appendix III.

KULSI PLANTATION MEMORANDUM.

Measurement of trees of the different species, details of expenditure incurred, and table showing the rainfall in 1885-86.

RUBBER PLANTATIONS.

EASTERN BLOCK, 1873 TO 1877.

Area 88 acres.

Number of dominant trees measured.	Average height.	Average girth.
100	30′	2′ 6″

The measurements of the largest and finest are noted below:—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	45	6	0
2	40	3	2
3	40	3	2
4	41	3	7
5	39	3	1
6	38	2	6
7	39	2	7
8	36	4	5
9	38	3	1
10	37	3	7

Number alive.	Number of vacancies.	Number newly-planted.	Total.
2,391	37	8	2,436

This block is interplanted with Tun between the Rubber lines. The Tun-trees now number upwards of 15,000, and the dimensions of the 50 largest average 25′ in height and 11″ in girth. The size of the largest is 33′ in height by 1′ 7″ in girth.

WESTERN BLOCK, 1878.

Area 13 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	38′	3′ 3″

Amongst the finest are the following:—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	46	3	6
2	41	2	9
3	48	3	7
4	44	2	7
5	42	2	9
6	43	3	7
7	40	7	5
8	40	3	2
9	43	2	6
10	45	3	11

Number alive.	Number of vacancies.	Number newly planted.	Total.
428	4	...	432

In this block 124 bamboo clumps are interplanted.

WESTERN BLOCK, 1883 AND 1884.

Area 47·55 acres.

In the compartment of 1883, 50 trees were measured with the following results:—

Number of dominant trees measured.	Average height.	Average girth.
50	17′	10″

The ten largest trees measured are as follows:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	26	0	8
2	25	1	5
3	24	1	8
4	24	1	7
5	21	1	11
6	20	1	0
7	19	0	11
8	20	0	9
9	21	1	0
10	20	1	2

Number alive.	Number of vacancies.	Number newly planted.	Total.	Remarks.
1,016	84	3	1,103	Includes 24 Ceara Rubber.

Here 391 bamboo clumps are interplanted.

In the compartment 1884, area 26·55, also 50 trees were measured with the following results:—

Number of dominant trees measured.	Average height.	Average girth.
50	15′	7′ 1″

The measurements noted below are those of the largest in this compartment:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	18	0	10
2	17	0	9
3	18	0	8
4	17	1	0
5	17	0	8
6	16	0	8
7	17	0	10
8	18	0	7
9	18	0	7
10	17	0	8

Number alive.	Number of vacancies.	Number newly planted.	Total.
1,171	55	...	1,226

The following was the expenditure in each block separately:—

EASTERN BLOCK, 1873 TO 1877.

	Rs.	A.	P.
Clearing Poma plants	45	2	3
Planting bamboos	1	15	0
Repairing fence	563	1	3
Cutting climbers	55	15	6
Transplanting Poma and Nahor	13	11	3
Ditto Rubber	5	12	0
Hoeing	40	9	9
Measuring trees	0	2	0
Total ...	726	5	0

WESTERN BLOCK, 1878 AND 1883 TO 1885.

	Rs.	A.	P.
Planting bamboos	8	11	6
Clearing jungle	50	1	3
Cutting climbers	20	10	0
Transplanting, straightening, tying, and earthing up Rubber plants ...	96	15	9
Fencing and repairing fence	13	6	6
Collecting and sowing seed	7	5	0
Watching at night	9	8	0
Clearing and weeding plants	8	5	9
Repairing watch-house	1	0	0
Total Rs. ...	215	15	9

TEAK PLANTATIONS.

COMPARTMENT, 1872.

Area 8·75 acres.

The measurement of trees in this plantation gave the following results :—

Number of dominant trees measured.	Average girth.
50	2′ 8″

The following are among the best trees measured in this plantation :—

Number.	Girth. Feet.	Girth. Inches.
1	3	10
2	3	10
3	3	7
4	3	6
5	3	4
6	3	3
7	3	1
8	3	1
9	3	0
10	3	0

The girth is measured at four feet from the ground. The height of the above trees is between 60 and 70 feet.

There are 87 Pithecolobium-trees of an average height of 27 feet and 13 inches in girth in this compartment and one Ceara Rubber-tree.

COMPARTMENT, 1873.

Area 33 acres.

Number of dominant trees measured.	Average girth.
50	2′ 2″

Amongst the largest trees in this plantation are the following :—

Number.	Girth. Feet.	Girth. Inches.
1	3	0
2	2	10
3	2	10
4	2	9
5	2	7
6	2	5
7	2	5
8	2	4
9	2	4
10	2	4

The total expenditure in these two compartments during the year has been Rs. 10-13-6.

COMPARTMENT, 1874.

Area 17 acres.

Number of dominant trees measured.	Average height of trees.	Average height of bole.	Average girth.
50	64′	38′	2′ 4″

The following are the best amongst the trees measured:—

Number.	Average height of tree. Feet.	Average height of bole. Feet.	Average girth. Feet.	Average girth. Inches.
1	78	51	3	1
2	71	35	2	10
3	70	32	2	8
4	65	40	3	2
5	72	49	2	8
6	62	40	2	4
7	70	27	3	0
8	67	38	2	4
9	67	20	2	5
10	60	51	2	9

The total expenditure in this compartment during the year has been Rs 4-1-6.

COMPARTMENT, 1875.

Area 60 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	51′	1′ 10′

The following are amongst the finest:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	74	3	3
2	76	2	11
3	78	2	9
4	78	2	2
5	79	2	8
6	70	2	10
7	72	2	9
8	64	2	9
9	64	2	4
10	62	2	2

This plantation is very irregular, and the size of the trees on the greater portion of the hill is much less. The area is, however, fully stocked, and there are numbers of young Sama seedlings besides other trees scattered over the plantation.

The expenditure in this compartment during the year has been Rs. 88-6-3.

COMPARTMENT, 1878.

Area 20 acres.

Number of dominant trees measured.	Average height.	Average girth.
60	50′	1′ 9″

Amongst the best are the following:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	59	2	2
2	56	2	10
3	56	2	0
4	60	2	4
5	56	2	1
6	55	2	2
7	55	1	8
8	54	2	9
9	53	2	10
10	52	1	11

The expenditure in this compartment during the year has been Rs. 49-4-6.

COMPARTMENT, 1879.

Area 10 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	34′	1′

The ten largest measured respectively :—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	41	1	4
2	40	1	2
3	40	1	2
4	39	1	2
5	38	1	4
6	37	1	2
7	36	1	0
8	35	1	0
9	34	1	2
10	35	1	3

The Tun-trees in this compartment were also measured, and gave the following results :

Number of dominant trees measured.	Average height.	Average girth.
50	35′	1′ 2″

The following are the finest :—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	40	1	4
2	41	1	1
3	39	1	0
4	39	1	5
5	40	1	4
6	39	1	4
7	41	1	3
8	39	1	3
9	39	1	5
10	37	1	8

There are 22 Ceara Rubber plants, of an average height of 16 feet and of girth 7 inches, in this compartment.

The expenditure in this compartment during the year has been Rs. 10-8-0.

COMPARTMENT, 1881.

Area 20 acres.

Number of dominant trees measured.	Average height.	Average. girth.
50	34′	1′

The following are amongst the largest in this compartment :—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	41	1	6
2	41	1	3
3	41	1	2
4	38	1	4
5	38	1	2
6	38	1	2
7	38	1	1
8	36	1	1
9	36	1	0
10	37	1	2

In the above compartment are also the following :—

Pithecolobium samon, 292 trees, of which ten are of an average height of 33 feet, with a girth of 19 inches. These form an avenue along roadside, and have nearly closed overhead.

There are also 180 Khoir-trees, ten of which average 22 feet in height with a girth of 8 inches. Besides, there are Sisu, Ajhar, Sama, and others. The average height of the ten best Sisu is 23 feet and girth 8 inches. The expenditure in this compartment during the year has been Rs. 25-11-3.

SISU PLANTATION, 1873.

Area 20 acres.

Nearly one-half of this compartment is sown with Ajhar, in beds four feet in width of an average length of 267 feet, of which there are 91 in number. The young trees have come on well and now average over three feet in height. The rest is composed of Sisu and Poma with a sprinkling of Ajhar.

Sisu.

Number of dominant trees measured.	Average height.	Average girth.
50	34′ 10″	1′ 6″

The following are the best :—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	42	1	11
2	41	1	9
3	40	2	1
4	42	2	3
5	42	2	0
6	42	1	11
7	42	1	11
8	40	1	9
9	39	1	11
10	38	1	10

Poma.

Number of dominant trees measured.	Average height.	Average girth.
50	42′	2′ 2″

The following are the largest amongst these :—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	56	2	7
2	50	1	11
3	42	1	9
4	48	1	11
5	42	1	9
6	48	2	3
7	48	3	4
8	51	2	0
9	49	2	0
10	44	2	2

The expenditure on these plantations during the year has been Rs. 126-5-9.

Bamboo Plantation, 1882.

This is fully stocked, and has proved a complete success.
The expenditure during the year was Rs. 15-3-6.

Cinchona Plantation.

The seedlings which remained in the nursery beds were all planted out during the year in three different localities. The plants have been counted with the following results :--

Compartment No. I.

Number alive.	Number dead.	Total.
101	194	295

Compartment No. 2.

Number alive.	Number dead.	Total.
160	63	223

Compartment No. 3.

	37	11	48
Total in 3 compartments. ...	298	268	566

There are, therefore, now left 298 cinchona plants of an average height of about three feet.

Nurseries.

The following results were obtained from countings made in the different nurseries:—

Rubber Nursery No. 1	837	plants.
" " No. 2	535	"
" " No. 3	6,900	"
Total ...	8,272	"

These plants would cover an area of more than 200 acres, if planted out. Those in Nursery No. 3 are all over ten feet in height.

There are eleven seed-beds of Ajhar, each four feet wide, and on an average 29 feet in length.

Broussonetia Papyrifera.

Nursery No. 1.

This nursery contains 190 Paper-mulberry-trees of an average height of 22 feet and nine inches in girth, also nine *Musa Textilis* and five Ceara Rubber plants.

Nursery No. 2.

Here are 46 trees averaging seven feet high and three inches in girth.

Nursery No. 3.

Here were counted 210 Paper-mulberry-trees of an average height of 9 feet and 4 inches in girth.

Besides the above, there are some seed-beds of this tree containing seedlings ready for transplanting.

Miscellaneous.

Bungalow Hill.

Here are two Maipak-trees, one at foot by river side and one on side of hill. They now measure 39 and 40 feet respectively with girths of 2 feet and 1 foot 1 inch, also 14 *Pithecolobium Samon* trees of an average height of 33 feet and 2 feet 7 inches girth.

The following Ceara Rubber trees with their measurements are also found here:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.	Remarks.
1	46	2	2	
2	45	1	4	
3	41	1	3	
4	39	1	8	
5	31	1	1	
6	30	0	10	
7	29	0	10	
8	32	1	10	These two lost their crowns formerly in a storm.
9	34	2	2	

The total expenditure on plantation work at the Kulsi during 1885-86 was the following :—

				Rs.	As.	P:
1.	Rubber—					
	Older or Eastern Block	88 acres	... ...	726	5	0
	New or Western „	60·55 „	... ...	210	5	9
2.	Teak compartment, 1873 to 1881,	160 „	... ...	188	13	0
3.	Sisu	20 „	... ...	126	5	9
4.	Bamboos	2 „	... ...	15	3	6
5.	Cinchona	2·90 „	... ...	121	2	3
6.	Experiments and exotic trees, *viz.*, *Broussonetia Papyrifera*, *Musa Textilis*, and Ceara Rubber		... ...	38	12	9
7.	Nurseries		... ...	251	0	0
8.	Establishment		... ...	166	12	3
	Grand Total as per summary		...	1,844	12	3

Annual rainfall at the Kulsi plantation:—

Months.		1884-85.	1885-86.
April	1885	5·77	6·12
May	„	8·64	7·49
June	„	10·51	14·97
July	„	17·96	15·11
August	„	18·93	12·66
September	„	9·12	18·17
October	„	1·85	1·10
November	„	·10	·08
December	„	.....	·31
January	1886	·45	·06
February	„	·23	·09
March	„	2·48	·62
	Total ...	79·04	76·78

A. J. MEIN,

Deputy-Conservator of Forests, Kámrúp Division.

Appendix IV.

CHARDUAR CAOUTCHOUC PLANTATION MEMORANDUM.

MEASUREMENT OF TREES, DETAILS OF EXPENDITURE INCURRED, AND TABLE SHOWING THE RAINFALL IN 1885-86.

MEASUREMENT AND COUNTING OF TREES.

Compartment.	Between 5 and 10 feet.	Between 10 and 15 feet.	Between 15 and 20 feet.	Between 20 and 25 feet.	Between 25 and 30 feet.	Between 30 and 35 feet.	Between 35 and 40 feet.	Between 40 and 45 feet.	Between 45 and 50 feet.	Over 50 feet.	Vacancies.	Total.
1	3	163	399	375	228	61	12	6	2	...	...	1,249
2	7	228	394	284	184	74	47	37	17	9	...	1,281
3	5	153	254	161	126	87	86	57	41	22	1	993
4	12	212	461	453	341	198	119	66	51	56	4	1,973
5	3	155	731	596	307	88	18	6	2	4	12	1,922
6	49	171	251	326	235	81	21	8	1	...	1	1,144
7	7	149	394	308	169	41	11	2	...	...	4	1,085
8	19	49	116	204	252	190	132	33	10	...	16	1,021
9	57	301	479	171	36	1	...	...	...	...	19	1,064
10	1	131	479	276	74	9	...	...	...	...	49	1,019
11	40	587	883	65	...	...	...	...	...	...	37	1,612
12	...	...	...	...	...	...	...	...	...	...	...	...
13	46	303	135	...	...	...	...	...	...	...	17	501
Total May 1886	249	2,602	4,976	3,219	1,952	830	446	215	124	91	160	14,864
„ April 1885	...	3,428	5,481	3,188	1,091	407	164	52	19	1	...	13,831
„ April 1884	359	6,383	5,137	1,427	467	139	48	20	1	...	30	14,011
BAMONI HILL PLANTATION.												
April 1886	...	37	48	63	94	178	277	97	...	...	...	794
April 1885	13	137	333	221	83	12	1	...	...	...	...	800
April 1884	14	145	294	257	59	4	...	...	...	...	...	800

Heights and Girths of fifty Trees measured, and each year's Plantation since 1874-75.

Years when planted.	1883-84.		1884-85.				1885-86.			
	Average height in feet.	Average girth in feet.	Average height in feet.		Average girth in feet.		Average height in feet.		Average girth in feet.	
	Feet.	Feet.	Feet.	Inch.	Feet.	Inch.	Feet.	Inch.	Feet.	Inch.
CHARDUAR.										
1874-75	40·06	3·55	43	4	5	5	49	0	8	11
1875-76	36·36	2·88	40	1	4	7	44	7	6	3
1876-77	34·17	2·38	38	2	4	9	46	10	4	11
1877-78	30·27	2·19	34	9	3	9	40	9	3	11
1878-79	25·41	1·55	30	2	2	5	33	10	3	4
1879-80	19·85	1·20	23	11	2	5	29	9	3	4
1880-81	15·69	0·98	20	1	1	10	24	7	1	11
BAMONI HILL.										
1874-75	.....	.....	24	11	5	5	36	6	2	4

Condition of the Nurseries at the end of 1885-86.

Compartment number.	Area in acres.	Number of seedlings.	Height.		
			Greatest.	Average.	Least.
Old nursery in Compartment No. 2 ...	5·34	29,402	24′ 7″	10′	1′
New ditto ditto „ 2 ...	0·42	6,046	15′	7′ 3″	1′
Old ditto ditto „ 3 ...	4·08	38,259	23′ 10″	8′ 6″	1′
New ditto ditto „ 3 ...	0·39	4,628	12′	6′	1′
Nursery in ditto „ 9 ...	4·13	31,892	22′	12′ 4″	2′
Ditto ditto „ 10 ...	9·36	58,798	18′	9′ 1″	1′
Total	23·72	169,025	.....	.....	.....

Details of Expenditure in the Charduár Caoutchouc Plantation during 1885-86, compared with the two previous years.

Particulars.	1883-84. Amount.	1884-85. Amount.	1885-86. Amount.
	Rs. As. P.	Rs. As. P.	Rs. As. P.
1. Establishments	179 13 3	205 5 7	129 15 9
2. Plantation fence, including guards for nurseries	500 8 0	453 0 0	534 10 0
3. Collection, carriage, sowing, and transplanting of various seeds.	122 10 0	311 4 0	38 0 0
4. Clearing lines, removing of trees and stumps, repairing mounds, renewing stakes, and levelling paths.	2,739 3 0	1,737 14 0	1,126 12 0
5. Nurseries, fencing, weeding, drainage, &c.	649 6 0	373 15 0	408 12 0
6. Pruning of trees in line	17 2 0	11 8 0	1 0 0
7. Planting out Rubber-trees A 1,356, B 770, and C 241.	201 14 0a	100 4 0b	28 6 0c
8. Miscellaneous	38 12 0	72 4 0	37 2 0
9. Cost of completing Compartment 11	326 12 0	.....	.....
10. Ditto ditto 12	109 2 0	71 10 0	.....
11. Ditto ditto 13	.....	473 13 0	199 8 0
12. Opening out ditto 14	.....	519 6 0	1,388 12 0
13. Repairing plantation buildings	5 0 0	.....	24 14 0
14. Commission on labour	.....	.....	.....
15. Expenditure on plantation road	.....	79 8 0	.....
16. Weeding, and clearing Nahor, Sam, Amari, and other seedlings in compartments.	.....	184 14 0	73 1 0
17. Cost of diverting the Mansiri	.....	127 10 0	13 8 0
Total	4,890 2 3	4,722 3 7	4,004 4 9

Rainfall at the Charduár Plantation, as compared with the previous two years.

Month.	Rainfall. 1883-84.	1884-85.	1885-86.
April 1885	3·73	2·67	3·99
May	13·23	10·55	8 49
June	12·61	12·76	24·59
July	21·48	12·14	17·98
August	18·96	19·07	15·54
September	6·33	7·90	14·3
October	0·92	3·30	9·89
November	0·28	0·18	0·83
December	1·24	0·37	2·06
January 1886	2·66	0·85	0·41
February	1·38	0·50	0·94
March	2·11	0·82	1·86
Total	84·93	71·11	100.61

JAMES T. JELLICOE,
Deputy-Conservator of Forests, Darrang Division.

Appendix V.

Experiment in tapping 50 selected Rubber-trees (Ficus elastica) in the Bálipára Reserved Forest, Darrang District, Assam, in 1886.

The experimental tapping, which has now reached its fourth year, was carried out in accordance with Conservator's orders under the divisional officer's supervision.

As in former years, no roots were touched, and the incisions were new ones on all the trees, and no old incisions were recut.

Of the six additional trees which were selected, as stated in Appendix V. of last year's report, only two were tapped again this year under instructions of the Conservator.

In addition to the tree mentioned as dead in last year's Appendix V., a second tree is to be added to the list of casualties. Tree No. 43 was found fallen, and, when tapped thoroughly, yielded 1 seer 12 chhataks, but next year nothing can be expected from it.

Details will be found in the following tabular statement:—

Species.	How collected.	Trees previously tapped.				Trees never tapped before.*				Total.			
		Number of new incisions.	Yield.			Number of new incisions.	Yield.			Number of new incisions.	Yield.		
			Mds.	Srs.	Chs.		Mds.	Srs.	Chs.		Mds.	Srs.	Chs.
Shikabor	Liquid ...	.....	.....			6	0	18	4	6	0	18	4
	Dry	11	1	10	14½	14	0	31	10½	25	2	2	9
Bogibor	Liquid ...	1	0	0	13	.....	.....			1	0	0	13
	Dry	10	1	11	2½	7	0	10	10	17	1	21	12½
Shikabor	Liquid ...	.....	.....			1	0	9	10	1	0	9	10
Bogibor	" ...	.....	.....			1	0	2	1	1	0	2	1
	Total ...	22	2	22	14	29	1	32	3½	51	4	15	1½

* This heading has no reference to the year under report, but describes the condition of the trees when selected in the first instance.

The average yield, as compared with the two previous years, is given in the following statement:—

	Mds. S. Ch.		Average. 1883-84. Mds. S. Ch.	Average. 1884-85. Mds. S. Ch.	1885-86. Mds. S. Ch.
3 trees previously tapped gave...	0 6 4	from old incision average...	0 0 9	0 2 1½	22 trees 2 22 14 average 4 srs. $10\frac{9}{11}$ chs.
19 " " " ...	1 18 8	" new " ...	0 1 $3\frac{8}{11}$	0 3 $1\frac{8}{11}$	
2 trees never tapped before ...	0 4 0	" old " ...	0 1 $4\frac{3}{14}$	0 2 0	27 trees 1 md. 20 srs. 8½ chs. average 2 srs. 12½ chs.
24 " " " ...	1 14 0	" new " ...	0 1 $15\frac{14}{19}$	0 2 $3\frac{14}{19}$	
48* " " ...	3 2 12		.....		* 49 trees 4 mds. 3 srs. 6¼ chs.
2 " " ...	0 5 2	" " "	.....	0 2 9	2 trees 11 srs. 11 chs. average 5 srs. 13½ chs.
	3 7 14				4 mds. 15 srs. 1½ chs.

* The Rubber from one tree was shown last year as stolen.

The work was commenced in the Koliajuli Hills on the 8th January 1886, and completed on the 24th. In the Sonai Hills the trees were tapped on the 29th and 30th January, and the dry Rubber collected from them on the 4th February. With the exception of one rainy day, the weather was fine, and in every way suitable for the experiment.

The "Loaf" or "Slab" Rubber was weighed 15 days after it had been prepared, but the "ball" Rubber was weighed daily as it was collected. In this way the quantity shown in the returns amounted to 4 mds. 15½ srs., 1½ chs. but the quantity sold in Calcutta was only 4 mds. 4 srs. 10 chs., the deficit of 10 srs. 7½ chs. being due to driage.

Further details are attached in the usual form.

FOREST DEPARTMENT, ASSAM.—DARRANG DIVISION.

Statement showing the Result of an experimental Tapping of 52 Rubber-trees in the Bálipára Reserve, Darrang District in 1886.

Number of trees.	Measurement of trees.			Locality and nature of soil.	Kind of trees.	Rubber extracted in balls or loaves.	Conditions of trees.	Date.		Yield from each tree.	Remarks.
	Height.	Girth, including aërial root.	Diameter of crown.					Tapped.	Collected.	M. S. C.	
1	99′	27′	92′	Valley of Balijuli, sandy loam with pebbles.	Shikabor.	Ball ...	Good, 3 main aerial roots.....	30th January 1886.	4th February 1886.	0 0 15	
2	91′	26′	100′	Side of hill near Sonai river, sandy loam.	Ditto ...	Ditto ...	Very good, 2 ditto	29th January 1886.	Ditto ...	0 2 0	
3	90′	32′	110′	Ditto ditto	Ditto ...	Ditto ...	Good, 4 ditto	Ditto ...	Ditto ...	0 1 10	
4	110′	36′	75′	Valley of Sonai river, low, sandy loam.	Ditto ...	Ditto ...	" 7 ditto	30th January 1886.	Ditto ...	0 0 13	
5	90′	47′	80′	Bank of ditto ditto ...	Ditto ...	Ditto ...	" 4 ditto	Ditto ...	Ditto ...	0 0 12	
6	97′	28′	94′	Valley of Jounjajuli, low, sandy loam.	Bogibor.	Ditto ...	" 3 ditto	29th January 1886.	Ditto ...	0 0 8	
7	105′	28′	120′	Ditto ditto ...	Ditto ...	Ditto ...	" 2 ditto	Ditto ...	Ditto ...	0 1 8	
8	122′	130′	160′	Ditto ditto ...	Ditto ...	Ditto ...	Very good, 17 ditto	Ditto ...	Ditto ...	0 1 0½	
9	100′	27′	80′	Ditto ditto ...	Ditto ...	Ditto ...	" 3 ditto	Ditto ...	Ditto ...	0 1 8	Label missing, replaced 4th February 1886.
10	122′	77′	110′	South of Guirnija Hill, ditto ...	Shikabor.	Ditto ...	" 6 ditto	30th January 1886.	Ditto ...	0 1 12	
11	122′	40′	70′	Valley of Balijuli ditto ...	Bogibor...	Ditto ...	Good 2 ditto	Ditto ...	Ditto ...	0 1 2½	
12	91′	64′	120′	Foot of Guirnija Hill, ditto ...	Shikabor.	Ditto ...	Very good, 4 ditto	11th January 1886.	18th January 1886.	0 6 2	
13	118′	26′	83′	Right bank of Koliajuli, river Mansiri; low, rich, sandy loam.	Ditto ...	Loaf ...	" 2 ditto	19th ditto ...	20th ditto ...	0 2 1 0 0 6	Scrapings.
14	99′	54′	55′	Left bank of Koliajuli; low, rich sandy loam.	Bogibor.	Ball ...	Good 8 ditto	8th ditto ...	14th ditto ...	0 2 11	
15	100′	74′	142′	Ditto ditto ..	Shikabor.	Ditto ...	Very good, 2 ditto	9th ditto ...	15th ditto ...	0 4 8½	
16	100′	54′	120′	Ditto ditto ...	Ditto ...	Ditto ...	" 2 ditto	9th ditto ...	17th ditto ...	0 4 7	Label missing, replaced 17th March 1886.
17	89′	71′	110′	Left bank of Chaojuli; slightly elevated; rich, sandy loam.	Ditto ...	Ditto ...	" 3 ditto	10th ditto ...	19th ditto ...	0 9 0	
18	112′	80′	137′	Left bank of Chaojuli, low, rich, sandy loam.	Bogibor...	Ditto ...	" 6 ditto	10th ditto ...	17th ditto ...	0 10 9	
19	80′	28′	70′	Ditto ditto ...	Ditto ...	Ditto ...	Good, 1 large branch has been blown down since last year. 1 main aerial root.	10th ditto ...	17th ditto ...	0 0 1	Only the fallen branch was tapped.
20	120′	37′	122′	Valley of Chaojuli, low, rich, sandy loam.	Shikabor.	Ditto ...	Good, 2 main aerial roots	10th ditto ...	19th ditto ...	0 6 14	Label missing, replaced 17th March 1886.
21	98′	101′	100′	Left bank of Chaojuli; low, rich, sandy loam.	Bogibor...	Ditto ...	" 6 ditto	9th ditto ...	15th ditto ...	0 6 4	-
22	120′	69′	91′	Right bank of Koliajuli; low, rich, sandy loam.	Ditto ...	Loaf ...	" 6 ditto	18th ditto ...	19th ditto ...	0 0 10 0 0 3	Scrapings.
23	120′	85′	124′	Left bank of Koliajuli; low, sandy loam.	Shikabor.	Ball ...	" 11 ditto	15th ditto ...	21st ditto ...	0 5 10	

24	97	73′	65′	Left bank of Koliajuli; top of steep hill, sandy loam.	Ditto ...	Ditto ...	"	8	ditto	15th ditto ...	21st ditto ...	0	1	3		
25	100′	101′	118′	Left bank of Koliajuli; side of hill, sandy loam.	Ditto ...	Loaf ...	"	24	ditto	21st ditto ...	22nd ditto ...	0 0	1 0	1 5	Ditto.	
26	100′	17′	63′	Left bank of Koliajuli; top of steep hill, sandy loam.	Ditto ...	Ball ...	"	1	ditto	15th ditto ...	21st ditto ...	0	4	4½		
27	97′	29′	100′	Left bank of Koliajuli; side of steep hill, sandy loam.	Ditto ...	Loaf ...	"	2	ditto	21st ditto ...	22nd ditto ...	0 0	2 0	7 5	Ditto.	
28	81′	20′	75′	Head of a ravine; sandy loam	Bogibor ...	Ball ...	"	2	ditto	15th ditto ...	21st ditto ...	0	1	4		
29	124′	100′	96′	West of Chaojuli; top of hill, sandy loam.	Shikabor.	Ditto ...	"	8	ditto	12th ditto ...	20th ditto ...	0	4	12		
30	126′	46′	114′	West of Chaojuli; edge of stream, sandy loam.	Ditto ...	Ditto ...	"	3	ditto	12th ditto ...	19th ditto ...	0	3	0		
31	90′	55′	68′	East of Chaojuli; top of hill, sandy loam.	Bogibor...	Ditto ...	"	4	ditto	13th ditto ...	20th ditto ...	0	1	10		
32	84′	44′	67′	Koliajuli Hill; top of hill, sandy loam.	Shikabor..	Ditto ...	"	4	ditto	13th ditto ...	20th ditto ...	0	1	8		
33	99′	46′	78′	Koliajuli Hill; foot of hill, sandy loam.	Ditto ...	Ditto ...	"	4	ditto	13th ditto ...	20th ditto ...	0	2	8		
34	100′	37′	68′	Ditto ditto ...	Ditto ...	Ditto ...	"	3	ditto	13th ditto ...	20th ditto ...	0	3	9		
35	92′	38′	99′	West of Chaojuli ditto ...	Ditto ...	Ditto ...	"	4	ditto	13th ditto ...	20th ditto ...	0	1	1		
36	99′	77′	106′	Valley of Karmarjuli; slightly elevated, sandy loam.	Ditto ...	Ditto ...	"	7	ditto	12th ditto ...	18th ditto ...	0	3	1		
37	100′	80′	84′	Ditto ditto ...	Ditto ...	Ditto ...	"	6	ditto	12th ditto ...	18th ditto ...	0	4	2		
38	98′	45′	65′	Valley of Koliajuli; sandy loam ...	Ditto ...	Loaf ...	Very good,	4	ditto	19th ditto ...	20th ditto ...	0 0	3 0	13 1	Ditto.	
39	98′	34′	70′	Koliajuli Hills, top of hill, sandy loam.	Bogibor...	Ball ...	Good,	3	ditto	12th ditto ...	19th ditto ...	0	1	2		
40	90′	96′	186′	Valley of Karmarjuli, sandy loam	Ditto ...	Ditto ...	"	6	ditto	11th ditto ...	18th ditto ...	0	9	8		
41	88	42′	75′	Ditto ditto ...	Ditto ...	Ditto ...	"	5	ditto	11th ditto ...	18th ditto ...	0	2	3		
42	97′	89′	180′	Mouth of Chaojuli, ditto ...	Ditto ...	Ditto ...	Very good,	12	ditto	8th ditto ...	14th ditto ...	0	11	9		
43	.....	.....	.....	Fallen and lying across the stream	Shikabor..	Ditto ...	Is still green			8th ditto ... 14th ditto ...	14th ditto ... 21st ditto ...	0 0	1 0	4 8		
44	.....	.....	.....	Dead, *vide* last year's return	.....	.....	.....			.....	.....	.....				
45	100′	28′	75′	Koliajuli Hills; top of hill, sandy loam.	Shikabor..	Ball ...	Good,	4 main aerial roots		17th ditto ...	22nd ditto ...	0	2	1		
46	100′	101′	115′	Ditto ditto ...	Ditto ...	Loaf ...	"	11	ditto	17th ditto ...	18th ditto ...	0 0	3 1	13 12	Ditto.	
47	100′	69′	88′	Ditto ditto ...	Ditto ...	Ditto ...	Very good,	2	ditto	17th ditto ...	18th ditto ...	0 0	1 0	11 9	Ditto.	
48	99′	55′	60′	Ditto ditto ...	Bogibor...	Ball ...	Good,	10	ditto	17th ditto ...	22nd ditto ...	0	2	8½		
49	129′	87′	124′	Ditto, side of hill ditto ...	Ditto ...	Ditto ...	Very good,	11	ditto	17th ditto ...	22nd ditto ...	0	6	12	Label missing, replaced 17th March 1886.	
50	120′	39′	132′	Right bank of Koliajuli; sandy loam.	Shikabor..	Ditto ...	"	2	ditto	14th ditto ...	22nd ditto ...	0	5	4		
51	80′	80′	136′	Between Koliajuli and Mansiri river; sandy loam.	Ditto ...	Loaf ...	"	6	ditto	23rd ditto ...	24th ditto ...	0 0	8 1	8 2	Liquid. Srs. Chs. 24 0 Scrapings. 1 8	
52	101′	45′	168′	North east of Koliajuli near Aka hat; sandy loam.	Bogibor...	Ditto ...	Good,	5	ditto	23rd ditto ...	24th ditto ...	0	1	15	7 8 0 3	
				The loaf rubber was weighed 15 days after preparation.				Grand Total.....		.....	.....	0 4	0 15	2 1½	Scrapings.	

JAMES T. JELLICOE,
Deputy-Conservator of Forests, Darrang Division.

Appendix VI.

Statement showing the number of Permits granted in 1885-86, as compared with those granted in the previous year.

Name of division.	Trade permits.		Elephant permits.		Garkati permits.		Time permits.		Home permits.		Amount of fees.	
	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.
											Rs.	Rs.
Gáro Hills	.....	91	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
Foreign passes	.....	.....	.....	.....	2,662	3,281	.....	.....	.....	.....	5,324	6,562
Gáro "	.....	.....	.....	.....	1,667	2,003	.....	.....	.....	.....	625	751
Goálpára	50	126	.....	.....	.....	.....	1	11	193	154	34	74
Kámrúp	811	649	.....	.....	.....	.....	26	32	351	752	407	356
Darrang	360	473	.....	.....	.....	.....	7	18	1,377	1,414	210	270
Nowgong		109	.....	.....	.....	.....		3		27		57
Sibságar	178	440	.....	.....	.....	.....	241	299	499	324	370	543
Lakhimpur	289	137	.....	.....	.....	.....	488	295	169	21	632	369
Cachar	2,678	2,512	127	133	.....	.....	.....	.....	208	178	2,909	1,389
Sylhet	585	1,627	.....	41	.....	.....	.....	.....	252	4,509	711	854
Khási and Jaintia Hills	68	.....	.....	.....	.....	.....	.....	.....	362	.....	249	... ...
Total	5,019	6,164	127	174	4,329	5,284	763	658	3,411	7,379	11,471	11,270

Appendix VII.

Statement showing Increase and Decrease in Forest Produce removed by Purchasers in 1885-86 as compared with that removed in the previous year.

Description of forest produce.		Gáro Hills Division.				Goálpára Division.				Kámrúp Division.				Darrang Division.				Nowgong Division.				Sibsagar Division.			
		1884-85.	1885-86.	In-crease.	De-crease.	1884-85.	1885-86	In-crease.	De-crease.	1884-85.	1885-86.	In-crease.	De-crease.	1884-85.	1885-86.	In-crease.	De-crease.	1884-85.	1885-86.	In-crease.	De-crease.	1884-85.	1885-86.	In-crease.	De-crease.
Reserved Forests.																									
Sál-trees	c. ft.	.....	840	840	....	31,920	14,280	....	17,640	47,400	46,798	....	2,078	....	37	37	....	960	550	....	410	....	....	....	....
First-class trees	do.	.....	....	....	....	4,710	4,110	....	600	4,170	3,322	....	848	2,430	1,325	....	1,105	420	50	....	370	2,070	4,900	2,830	....
Second-class trees	do.	.....	....	....	....	1,770	2,040	270	....	1,530	2,376	846	....	22,500	10,800	....	11,700	120	125	5	....	18,120	10,925	....	7,195
Total		.....	840	840	....	38,400	20,430	270	18,240	53,100	52,496	846	2,926	24,930	12,162	37	12,805	1,500	725	5	780	20,190	15,825	2,830	7,195
First-class timber	c. ft.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Second ditto	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Third ditto	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Converted timber	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total		.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Poles or saplings	c. ft.	.....	....	....	....	5,250	....	....	5,250	....	....	....	....	....	34	34	....	....	....	....	....	17,550	21,564	4,014	....
Boats or dugouts	do.	.....	....	....	....	300	....	....	300	....	....	....	....	....	....	....	....	....	....	....	....	25	260	235	....
Dead wood	do.	.....	230	230	....	9,910	32,870	22,960	....	59,380	23,316	....	36,064	....	237	237	....	160	....	....	160	300	604	304	....
Miscellaneous pieces	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Trade permits	No.	.....	6	6	....	40	126	86	....	811	649	....	162	14	....	....	14	6	....	....	6	52	....	....	52
Firewood	c. ft.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	1,350	1,350	....	....	6,150	6,150	....
Ditto (rafts)	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto permits (annual)	No.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto ditto (monthly)	do.	.....	....	....	....	1	11	10	....	....	....	....	....	....	3	3	....	....	3	3	....	46	....	....	46
Charcoal	c. ft.	.....	....	....	....	450	436	....	14	....	540	540	....	....	....	....	....	....	....	....	....	5,724	....	....	5,724
Bamboo	No.	.....	....	....	....	.....	.....	....	....	356	239	....	117	....	400	400	....	....	....	....	....	....	775	775	....
Canes (bundles)	do.	.....	....	....	....	26,019	400	....	25,619	....	60	60	....	....	9,600	9,600	....	2,464	4,596	2,132	....	9,500	4,100	....	5,400
Agar (baskets)	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grass and reeds (bundles)	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Silk-worm trees		.....	....	....	....	.....	.....	....	....	....	242	242	....	....	....	....	....	....	....	....	....	....	....	....	....
Betel creeper		.....	....	....	....	.....	.....	....	....	....	26	26	....	....	....	....	....	....	....	....	....	....	....	....	....
Lac-tree		.....	....	....	....	.....	.....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Protected and District Forests.																									
Sál-trees	c. ft.	3,930	2,190	....	1,740	.....	90	90	....	22,260	32,971	10,711	....	....	....	....	....	660	216	....	444	....	....	....	....
First-class trees	do.	6,090	12,270	6,180	....	120	600	480	....	1,530	5,158	3,628	....	14,730	6,300	....	8,430	4,980	3,960	....	1,020	11,220	11,250	30	....
Second-class trees	do.	4,050	6,690	2,640	....	2,310	810	....	1,500	2,340	5,097	2,757	....	16,560	10,550	....	6,010	9,000	6,840	....	2,160	16,020	26,650	10,630	....
Miscellaneous do.	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total		14,070	21,150	8,820	1,740	2,430	1,500	570	1,500	26,130	43,226	17,096	....	31,290	16,850	....	14,440	14,640	11,016	....	3,624	27,240	37,900	10,660	....
First-class timber	c. ft.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Second do. ditto	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Third do. ditto	do	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Converted ditto	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total		.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Poles or saplings	c. ft.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	1,788	1,788	....	400	....	....	400	12,340	5,982	....	6,358
Boats or dugouts	do.	22,775	27,450	4,675	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2,875	4,240	1,365	....
Dead wood	do.	15,410	19,360	3,950	....	80	1,150	1,070	....	3,850	954	....	2,896	....	....	....	....	1,190	3,638	2,448	....	20	1,778	1,758	....
Miscellaneous pieces	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	990	....	....	990	....	....	....	....
Trade permits	No.	.....	85	85	....	10	.....	....	10	....	....	....	....	149	473	324	....	191	109	....	82	178	440	262	....
Garkátu passes (foreign)	do.	2,662	3,281	1,208	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto ditto (Garo)	do.	1,667	2,003	615	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Firewood	c. ft.	.....	....	....	....	.....	.....	....	....	....	1,100	1,100	....	....	....	....	....	....	882	882	....	....	12,700	12,700	....
Ditto permits (annual)	No.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	2	....	....	2	....	....	....	....
Ditto ditto (monthly)	do.	.....	....	....	....	.....	.....	....	....	26	32	6	....	....	18	18	....	7	....	....	7	195	299	104	....
Charcoal	c. ft.	.....	....	....	....	1,431	.....	....	1,431	2,106	702	....	1,404	21,429	8,080	....	13,349	....	6,795	6,795	....	7,443	49,311	41,868	....
Bamboos	No.	.....	....	....	....	.....	.....	....	....	....	100	100	....	707	315	....	392	1,278	....	....	1,278	2,025	500	....	1,525
Canes (bundles)	do.	.....	....	....	....	400	100	....	300	....	2,000	2,000	....	13,234	10,325	....	2,909	9,551	24,620	15,069	....	16,509	46,160	29,651	....
Grass ditto	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Do. and reeds	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Reeds	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Agar (baskets)	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Leaves (dals)	do.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Home permits	do.	.....	....	....	....	193	154	....	39	351	752	401	....	1,377	1,414	37	....	....	27	27	....	499	324	....	175
Silk-worm trees		.....	....	....	....	.....	.....	....	....	....	162	162	....	....	....	....	....	....	....	....	....	....	....	....	....
Betel creeper		.....	....	....	....	.....	.....	....	....	....	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....
Elephant tusks	seers.	.....	....	....	....	.....	.....	....	....	....	23	23	....	....	....	....	....	....	....	....	....	....	....	....	....
Minor produce permits	No.	.....	....	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Appendix VII.—(*Concluded.*)

Description of forest produce.		Lakhimpur Division.				Cachar Division.				Sylhet Division.				Khási and Jaintia Hills Division.				Nága Hills Division.				Free grants in the whole province.			
		1884-85.	1885-86.	In-crease.	De-crease.	1884-85.	1885-86.	In-crease.	De-crease.	1884-85.	1885-86.	In-creesa.	De-crease.	1884-85.	1885-86.	In-creas e.	De-crease.	1884-85.	1885-86.	In-crease.	De-crease.	1884-85.	1885-86.	In-crease.	De-crease.
Reserved Forests.																									
Sál-trees	c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1,350	1,350	....
First-class trees	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Second ditto	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	120	120	....
Total trees		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1,470	1,470	....
First-class timber	c. ft.	....	....	....	....	22,060	13,228	....	8,832	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Second ditto	do.	....	....	....	....	12,560	14,946	2,386	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Third ditto	do.	....	....	....	....	151,260	137,987	....	13,273	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Converted timber	do.	....	....	....	....	243	444	201	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total		....	....	....	....	186,123	166,605	2,587	22,105	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Poles or saplings	c. ft.	....	....	....	....	....	1,248	1,248	....	....	....	....	....	....	....	....	....	....	....	....	....	....	64	64	....
Boats or dugouts	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dead wood	do.	....	....	....	....	....	1,008	1,008	....	....	....	....	....	....	....	....	....	....	....	....	....	....	18,618	18,618	....
Miscellaneous pieces	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Trade permits	No.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10,000	10,000	....
Firewood	c. ft.	....	....	....	....	6,998	9,278	2,280	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto rafts	No.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto permits (annual)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto ditto (monthly)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Charcoal	c. ft.	....	....	....	....	426,275	563,810	137,535	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1,700	1,700	....
Bamboos	No.	....	....	....	....	14,617	18,928	4,311	....	....	....	....	....	....	....	....	....	....	....	....	....	....	78	78	....
Canes (bundles)	do.	....	....	....	....	13	6	....	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Agar (baskets)	do.	....	....	....	....	2,800	....	....	2,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grass and reeds (bundles)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Silkworm trees		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Betel creeper		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lac tree		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Protected and District Forests.																									
Sál trees	c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	60	....	....	60	....	....	....	....	....	....	....	....
First-class trees	do.	14,460	25,290	10,830	....	....	....	....	....	....	....	....	....	150	75	....	75	90	....	....	90	....	108,450	108,450	....
Second ditto	do.	42,210	32,580	....	9,630	....	....	....	....	....	....	....	....	....	....	....	....	....	60	60	....	....	361,980	324,515	....	37,465
Miscellaneous trees	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total		56,670	57,870	10,830	9,630	....	....	....	....	....	....	....	....	210	75	....	135	90	60	60	90	361,980	432,965	108,450	37,465
First-class timber	c. ft.	....	....	....	....	12,080	15,136	3,056	....	3,604	25,689	22,085	....	....	....	....	....	....	....	....	....	....	....	....	....
Second ditto	do.	....	....	....	....	6,997	4,412	....	2,585	4,853	4,122	....	731	....	....	....	....	....	....	....	....	....	....	....	....
Third ditto	do.	....	....	....	....	43,680	31,936	....	11,744	11,965	20,136	8,171	....	....	....	....	....	....	....	....	....	....	....	....	....
Converted timber	do.	....	....	....	....	767	5,526	4,759	....	1,509	704	....	796	....	....	....	....	....	....	....	....	....	....	....	....
Total		....	....	....	....	63,524	57,010	7,815	14,329	21,922	50,651	30,256	1,527	....	....	....	....	....	....	....	....	....	....	....	....
Poles or saplings	c. ft.	....	....	....	....	520	712	192	....	....	....	....	....	....	19,500	19,500	....	....	....	....	....	367,320	3,252	....	364,068
Boats or dugouts	do.	1,125	....	....	1,125	5,000	....	....	5,000	....	61	61	....	....	1,850	1,850	....	....	....	....	....	....	....	....	....
Dead wood	do.	....	....	....	....	....	762	762	....	....	....	....	....	47,910	....	....	47,910	....	....	....	....	2,340	3,651	1,311	....
Miscellaneous pieces	do.	1,000	....	....	1,000	12,130	....	....	12,130	....	....	....	....	....	....	....	....	....	....	....	....	2,340	....	2,340	....
Trade permits	do.	289	137	....	152	2,678	2,512	....	166	585	1,627	1,042	....	68	....	....	68	....	....	....	....	....	....	....	....
Garkail passes (foreign)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto (Garo)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Firewood	c. ft.	....	....	....	....	2,612	3,097	485	....	208	142	....	66	....	....	....	....	....	....	....	....	27,278	309,103	281,825	....
Ditto permits (annual)	No.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto ditto (monthly)	do.	488	295	....	193	127	133	6	....	....	41	41	....	....	....	....	....	....	....	....	....	399	....	399	....
Charcoal	c. ft.	36,090	....	....	36,090	90	....	....	90	....	....	....	....	....	....	....	....	....	....	....	....	414	....	414	....
Bamboos	No.	1,275	....	....	1,275	107,487	108,783	1,296	....	278,763	322,200	43,437	....	....	....	....	....	....	....	....	....	97,068	1,406,562	1,309,494	....
Canes (bundles)	do.	91,350	317,950	226,600	....	3,967	3,549	....	418	6,282	819	....	5,463	....	....	....	....	....	....	....	....	25,855	21,137	....	4,718
Grass ditto	do.	....	....	....	....	....	....	....	....	95,437	....	....	95,437	361	....	....	361	....	....	....	....	35,780	2,700	....	33,080
Ditto and reeds	do.	....	....	....	....	126,590	6,027	....	120,563	....	99,035	99,035	....	....	....	....	....	....	....	....	....	....	56,369	56,369	....
Reeds	do.	....	....	....	....	....	....	....	....	1,752	....	....	1,752	....	....	....	....	....	....	....	....	80	....	....	80
Agar (baskets)	do.	....	....	....	....	7	47	40	....	10	8	....	2	....	....	....	....	....	....	....	....	....	....	....	....
Leaves (dals)	do.	....	....	....	....	....	....	....	....	19,000	....	....	19,000	....	....	....	....	....	....	....	....	....	....	....	....
Home permits	do.	169	21	....	148	208	178	....	30	252	4,509	4,257	....	362	....	....	362	....	....	....	....	....	....	....	....
Silkworm trees		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Betel creeper		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Elephant tusks	Sr.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Minor produce permits	No.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	38	....	....	38

APPENDIX VIII.

Appen

Statement showing Increase and Decrease in Forest Revenue collected in

Description of forest produce.	1				2				3				4				5			
	Direction.				Gáro Hills Division.				Goálpára Division.				Kámrúp Division.				Darrang Division.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
I. Timber and other produce removed from the forest by Government Agency.	..	..	..	..	254	342	88	....	....	....	....	....	9	70	61	....	70	184	114	..
II. Timber and other produce removed from the forest by consumers or purchasers.																				
Reserve Forests.																				
Sál trees	..	..	..	..	..	180	180	..	11,292	13,186	1,894	..	21,616	5,255	..	16,361	..	..	..	..
First-class trees	..	..	..	..	..	..	..	..	809	255	..	554	862	274	..	588	486	318	..	168
Second-class trees	..	..	..	..	..	..	..	..	162	309	147	..	142	82	..	60	1,510	864	..	646
Total	..	..	..	..	..	180	180	..	12,263	13,750	2,041	554	22,620	5,611	..	17,009	1,996	1,182	..	814
First-class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Second-class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Third ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Converted timber (pieces)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poles or saplings	..	..	..	..	..	..	..	..	23	40	17	..	.	6	6	..	..	..	..	..
Boats or dugouts	..	..	..	..	..	..	..	..	68	..	..	69	..	..	..	..	..	..	..	..
Dead-wood	..	..	..	..	..	24	24	..	571	1,705	1,134	..	2,124	4,020	1,896	..	..	31	31	..
Firewood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ditto licenses (monthly)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	..
Ditto " (annual)	..	..	..	..	..	..	..	..	9	..	..	9	..	..	..	..	..	..	..	..
Charcoal	..	..	..	..	..	..	..	..	6	6	..	..	..	7	7	..	..	..	..	..
Bamboos	..	..	..	..	..	..	..	..	..	..	..	..	6	2	..	4	..	8	8	..
Canes	..	..	..	..	..	..	..	..	195	3	..	192	..	..	..	..	..	76	76	..
Grass	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trade permit fees	..	..	..	..	..	3	3	..	20	55	35	..	368	284	..	84	7	19	12	..
Pass-fees	..	..	..	..	..	..	..	..	..	..	..	..	15	5	..	10	24	..	..	24
Miscellaneous minor produce	..	..	..	..	..	..	..	..	..	..	..	..	42	41	..	1	..	..	..	..
Rubber-mahals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Agar	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass and reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Permit and pass-fees	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Reserve Forests	..	..	..	..	..	207	207	..	13,166	15,569	3,227	824	25,175	9,976	1,909	17,108	2,027	1,319	130	838
Protected and District Forests.																				
Sál-trees	..	..	..	..	3,566	2,345	..	1,221	10	20	10	..	6,668	3,415	..	3,253	..	..	..	..
First-class trees	..	..	..	..	1,849	2,713	864	..	189	66	..	123	328	724	396	..	2,796	1,512	..	1,284
Second "	..	..	..	..	501	350	..	151	200	52	..	148	214	138	..	76	1,139	844	..	295
Miscellaneous trees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	5,916	5,408	864	1,372	399	138	10	271	7,210	4,277	396	3,329	3,931	2,356	..	1,579
First-class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Second "	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Third "	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Converted timber (pieces)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	10	..
Poles or saplings	..	..	..	..	..	..	..	..	..	3	3	..	..	..	..	..	..	20	20	..
Boats or dugouts	..	..	..	..	10	..	..	10	..	180	180	..	..	..	..	..	..	..	..	..
Ditto *ad valorem* duty of 10 per cent.	..	..	..	..	371	528	157	..	..	..	..	..	..	..	..	..	..	..	..	..
Timber on land allotted for cultivation	..	..	..	..	..	..	..	..	..	..	..	..	56	..	..	56	3,921	4,687	766	..
Dead wood	..	..	..	..	1,458	1,467	9	..	2	79	77	..	239	161	..	78	..	..	..	..
Firewood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ditto licenses (monthly)	..	..	..	..	..	..	..	..	..	..	..	..	39	33	..	6	..	16	16	..
Ditto ditto (annual)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	9	..
Charcoal	..	..	..	..	..	..	..	..	20	19	..	1	29	10	..	19	298	50	..	248
Bamboos	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	..	19	7	..	12
Canes	..	..	..	..	..	..	..	..	3	1	..	2	..	15	15	..	99	79	..	20
Reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grazing dues	..	..	..	..	19	55	36	..	..	..	..	..	..	..	..	..	..	..	..	..
Garkátí licenses	..	..	..	..	5,293	8,836	3,543	..	..	..	..	..	..	..	..	..	..	..	..	..
India-rubber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rubber *mahals*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22,100	22,312	212	..
Trade permit fees	..	..	..	..	..	43	43	..	5	.	..	5	..	..	..	..	74	56	..	18
Pass-fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	54	65	11	..
Permit and pass-fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lac-*mahals*	..	..	..	..	..	..	..	..	..	22	22	..	20	..	..	20	..	56	56	..
Miscellaneous minor produce	..	..	..	..	3	..	..	3	..	..	..	..	27	224	197	..	..	..	..	..
Agar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass-*mahál*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass and reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leaves	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Home consumption permits	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bonkar-*mahál*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Protected and District Forests	..	..	..	..	13,070	16,327	4,655	1,385	429	44	292	279	7,62[illegible]	4,728	611	3,508	30,500	29,723	1,100	1,877
Add outstandings realised during the year.	..	..	..	..	..	..	..	..	..	..	..	..	..	6,352	6,352	..	..	..	..	..
Total revenue under II.	..	..	..	..	13,070	16,544	4,859	1,385	13,595	16,011	3,519	1,103	32,798	21,052	8,873	20,616	32,527	31,042	1,230	2,715
III. Drift and waif wood and confiscated forest produce.	..	..	..	..	3	261	258	..	2	15	13	..	204	259	55	.	77	6	..	15
IV. Revenue on forests not managed by Government.	..	..	..	..	628	683	55	..	3	24	..	6	..	..	..	..	..	..	..	..
V. Miscellaneous	2	12	10	..	13	983	970	..	67	873	198	..	711	882	171	..	68	71	3	..
Grand Total	2	12	10	..	13,968	18,813	6,230	1,385	14,30[illegible]	16,923	3,730	1,109	33,710	22,26[illegible]	9,180	20,616	32,742	31,859	1,347	2,730

dix VIII.

1884-85, as compared with that collected in the previous year.

6				7				8				9				10				11				12			
Nowgong Division.				Sibsagar Division.				Lakhimpur Division.				Cachar Division.				Sylhet Division.				Khasi and Jaintia Hills Division.				Naga Hills Division.			
1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
320	216	..	104	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
84	12	..	72	414	1,544	1,130	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	10	3	..	1,266	2,143	877	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
411	238	3	176	1,680	3,687	2,007	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	4,628	4,191	..	437	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	1,216	3,611	2,395	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	9,365	8,118	..	1,247	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	15,209	15,920	2,395	1,684	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	41	..	..	41	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	110	235	125	..	..	..	..	..	..	19	19	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	6	2	..	4	..	..	..	..	..	75	75	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	12	44	93	49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	3	..	..	..	..	..	..	..	..	109	72	..	37	..	..	..	..	..	..	..	..	..	..	..	..
..	17	17	..	77	123	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	9	..	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	80	23	..	57	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	167	167	..	..	8	8	..	..	..	..	..	1,066	1,325	259	..	..	..	..	..	..	..	..	..	..	..	..	..
18	34	16	..	74	29	..	45	..	..	..	..	914	1,166	252	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	3	..	..	26	46	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	100	93	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	700	700	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	19	9	..	10	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	2,412	2,098	..	314	..	..	..	..	..	..	..	..	..	..	..	..
447	459	203	191	2,207	4,339	2,254	122	..	..	..	..	20,476	21,384	3,000	2,092	..	..	..	..	..	..	..	..	..	..	..	..
220	..	..	220	..	731	731	..	..	..	..	..	..	..	..	..	..	..	..	..	20	740	720	..	..	..	..	..
998	1,584	586	..	2,244	2,441	197	..	2,871	2,249	..	622	..	..	..	..	..	..	..	..	30	15	..	15	18	..	..	18
550	574	24	..	868	921	53	..	2,861	2,552	..	309	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1,768	2,158	610	220	3,112	4,093	981	..	5,732	4,801	..	931	..	..	..	..	..	..	..	..	50	755	720	15	18	4	4	18
..	..	..	..	..	..	..	..	..	..	..	..	2,683	4,006	1,323	..	901	6,422	5,521	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	1,292	832	..	460	910	773	..	137	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	2,570	2,110	..	469	748	1,259	511	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	6,554	6,948	1,323	929	2,559	8,454	6,032	137	..	..	..	..	..	..	..	..
61	..	..	61	..	..	..	..	9	..	..	9	197	39	..	158	162	72	..	90	..	..	..	..	..	..	..	..
3	206	203	..	78	52	..	26	..	..	..	..	3	4	1	..	..	..	..	..	..	194	194	..	..	..	..	..
..	..	..	..	354	245	..	109	143	111	..	32	532	930	398	..	..	5	5	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3,248	9	..	3,239	2,422	9,057	6,625	..	367	1,726	1,359	..	4,751	2,408	..	2,343	2,964	514	..	2,450	..	..	..	..	..	..	..	..
50	..	..	50	5	112	107	..	..	..	..	..	..	..	..	..	..	..	..	..	218	..	..	218	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	41	20	..	21	3	13	10	..	..	..	..	..	..	..	..	..
7	14	7	..	159	244	85	..	488	698	210	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	9	..	9	36	9	..	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	77	77	..	104	510	406	..	503	25	..	478	1	..	..	1	..	10	10	..	..	..	..	..	..	..	..	..
19	307	288	..	26	5	..	21	27	24	..	3	299	268	..	31	697	806	109	..	..	..	..	..	..	..	..	..
72	209	137	..	122	324	202	..	854	3,356	2,502	..	248	221	..	27	893	307	..	86	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55	..	..	55	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	258	..	..	258	25	..	..	25	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	166	..	..	166	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
280	128	..	152	..	..	..	..	10,080	6,400	..	3,680	1,150	1,150	..	..	..	..	..	..	350	..	..	350	..	..	..	..
100	224	124	..	63	189	126	..	144	180	36	..	..	..	..	..	585	1,497	912	..	68	..	..	68	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	957	711	..	246	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	821	896	75	..	..	..	..	..	..	..	..	..	..	..	..	..
55	249	194	..	12	41	32	..	..	12	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	10	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	340	1,913	1,573	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	11	70	59	..	15	109	94	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	41	43	..	372	..	1,270	1,270	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	35	65	27	..	..	628	628	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..	12	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	126	1,812	1,686	..	181	..	..	181	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	487	487	..	..	..	..	..	..	..	..	..
5,681	3,600	1,650	3,731	7,503	14,884	7,564	182	18,513	17,393	4,119	5,299	15,461	13,002	1,883	3,337	8,766	16,705	11,283	3,314	1,232	2,862	2,487	857	18	4	4	18
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6,128	4,059	1,853	3,922	9,710	19,223	9,818	305	18,513	17,393	4,119	5,299	35,537	34,446	4,883	5,974	8,766	16,705	11,283	3,314	1,232	2,862	2,487	857	18	4	4	18
229	115	..	114	252	197	..	55	17	76	59	..	397	302	..	95	27	30	3	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	4	..	..	4	2,720	5,253	2,533	..	..	..	..	..	360	4,812	3,952	..	..	..	..	..
38	..	..	38	406	605	199	..	618	643	25	..	568	683	115	..	23	402	379	..	57	38	..	19	..	..	..	..
6,395	4,174	1,853	4,074	10,428	20,025	9,957	360	19,152	18,062	4,203	5,303	39,222	40,684	7,531	6,069	8,816	17,137	11,685	3,314	1,649	7,212	6,439	876	18	4	4	18

Appendix IX.

Forest Produce exported from and remaining in the District of Cachar at the close of 1885-86.

MATIJURI AND SIYALTEK.

Description of forest produce.	Quantity of forest produce which passed the Matijuri revenue station.			Quantity of forest produce which had passed Matijuri and was again checked at Siyaltek forest revenue station.			Amount of forest produce which remained in the district of Cachar at the close of the year.		
	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.
Logs	981	2,558	3,539	555	1,926	2,481	426	632	1,058
Agar	22	.....	22	17	.....	17	5	.....	5
Posts and planks	.....	112	112	.....	150	150	.....	.....	.....
Poles	12	.....	12	.....	.....	.....	12	.....	12
Bamboos	67,900	73,227	141,127	49,110	59,042	108,152	18,790	14,185	32,975
Canes	5,349	8,373	13,722	3,732	7,474	11,206	1,617	899	2,516
Sun grass and reeds	1,200	19,612	20,812	1,200	6,609	7,809	.....	13,003	13,003
Charcoal	.....	30	30	.....	.....	.....	.....	30	30
Firewood	.....	1,054	1,054	.....	49	49	.....	1,005	1,005

Forest Produce exported from and remaining in the District of Cachar at the close of 1885-86.

SILCHAR AND SIYALTEK.

Description of forest produce.	Quantity of forest produce which passed the Silchar forest revenue station.			Quantity of forest produce which had passed Silchar and was again checked at Siyaltek forest revenue station.			Amount of forest produce which remained in the district of Cachar at the close of the year.		
	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.
Logs	5,376	4,492	9,868	1,580	1,461	3,041	3,796	3,031	6,827
Agar	31	.....	31	31	.....	31	.....	.....	.....
Posts and planks	166	314	480	80	89	169	86	225	311
Poles	369	.....	369	.....	.....	.....	369	.....	369
Bamboos	7,28,850	52,245	781,095	428,190	24,690	452,880	300,660	27,555	328,215
Canes	17,178	1,372	18,550	14,045	937	14,982	3,133	435	3,568
Sun grass and reeds	.....	1,091,488	1,091,488	.....	1,042,579	1,042,579	.....	48,909	48,909
Charcoal	.....	1,885	1,885	.....	.....	.....	.....	1,885	1,885
Firewood	6,012	23,607	29,619	203	144	347	5,809	23,463	29,272

Appendix IX —(*Continued.*)

Statement showing the Forest Produce removed from Government, Foreign, and Private Forests in the Cachar Division, in the year 1885-86.

Revenue station.	Locality.	Logs.			Agar.		Posts and planks.			Poles.		Bamboos.		Canes.		Sungrass and reeds.		Charcoal.		Firewood.		Pees.
		Number.	Cubic feet.	Amount.	Number.	Amount.	Number	Cubic feet	Amount	Number.	Amount.	Number.	Amount.	Number.	Amount.	Cubic feet.	Amount.	Maunds.	Amount.	Maunds.	Amount.	Amount.
				Rs. As.		Rs. As.			Rs. A P.		Rs. As.		Rs. A P		Rs. A. P.		Rs. A. P.				Rs A. P.	Rs. A
Silchar	Government.. Reserved forests	3,782	128,390	10,951 7	4	6 0	15	360	93 0 0	272	17 0	491,500	1,228 12 0	13,300	831 4 6	.....	.....	..	....	2,299	71 13 6	177 8
	Government.. District "	867	33 837	4,546 13	27	40 8	37	888	222 0 0	31	1 15	19,000	47 8 0	3,501	218 13 0	.....	.....	..	....	503	15 11 6	39 0
	Total	4,649	162,227	15,498 4	31	46 8	52	1,218	315 0 0	303	18 15	510,500	1,276 4 0	16,801	1,050 1 6	.....	.....	..	....	2,802	87 9 0	216 8
	Foreign	727	29,091	4,290 6	..	.....	114	96	8 14 6	66	4 2	218,350	545 14 0	377	23 9 0	.....	.....	..	....	8,210	185 0 0	44 8
	Private	4,492	105,811	.....	.	.....	314	915	.....	..	.....	52,245	.....	1,372	.....	1,091,488	.....	1,885	....	23.607	.....	.. ...
	Total Sonai	9,868	297,129	19,788 10	31	46 8	480	2,259	323 14 6	369	23 1	781,095	1,822 2 0	18,550	1,073 10 6	1,091.488	... ..	1,885	....	29,619	272 9 0	261 0
Matijuri	Government... Reserved forests	926	37.060	4.904 1	2	3 0	..	..	.....	..	.....	30,125	75 5 0	5,349	334 5 0	.....	.....	..	....	....	.....	43 8
	Government... District "	55	2,208	438 13	20	30 0	..	..	.....	..	.....	.....	... .	....	... .	1,200	37 8	..	....	....	.....	1 4
	Total	981	39,268	5,342 14	22	33 0	..	..	.....	..	. ....	30,125	75 5 0	5,349	334 5 0	1,200	37 8 0	..	....	....	.....	44 12
	Foreign	....	.....	.....	..	.....	..	..	....	12	0 12	37,775	94 7 0	....	.....	.....	.....	..	....	....	.....	.....
	Private	2.558	63,384	... .	..	... ..	112	125	.....	..	.....	73,227	.....	8,373	.....	19,612	.....	30	....	1,054	.....	.....
	Total Matijuri	3,539	102,652	5,342 14	22	33 0	112	125	.....	12	0 12	141,127	169 12 0	13,722	334 5 0	20,812	37 8 0	30	....	1,054	.....	44 12
Siyaltek	Government .. Reserved forests	6	234	34 13	..	.....	..	..	.....	..	.....	3 000	7 8 0	....	....	.....	.....	..	....	....	.....	1 0
	Government .. District "	490	16,089	1,599 4	..	.....	72	72	5 15 0	..	.....	87 783	219 7 3	33	2 1 0	5,827	22 5 6	..	....	141	4 6 6	44 0
	Total	496	16,323	1,634 1	..	.... .	72	72	5 15 0	..	.....	90,783	226 15 3	33	2 1 0	5,827	22 5 6	..	....	141	4 6 6	45 0
	Foreign	....	231	49 13	..	.....	..	..	.....	..	.....	2,200	5 8 0	....	..... .	.... .	....	..	.. .	....	.....	.....
	Private	624	16,555	.....	..	.....	450	1,161	.....	..	.....	55,310	.....	....	.....	372,378	.....	..	....	5	.....	.....
	Total Siyaltek	1,120	33,109	1,683 14	..	.....	522	1,233	5 15 0	..	.....	148,293	232 7 3	33	2 1 0	378,205	22 5 6	..	....	146	4 6 6	45 0

Statement showing the Increase and Decrease in Forest Produce removed from the Government, Foreign, and Private Forests in the Cachar Division during 1885-86, as compared with 1884-85.

Description of forest produce.	Government forests.								Foreign forests.								Private forests.			
	1884-85.			1885-86.					1884-85.			1885-86								
	Royalty paid.	Royalty out-standing.	Total.	Royalty paid.	Royalty out-standing.	Total.	Increase.	Decrease.	Royalty paid.	Royalty out-standing.	Total.	Royalty paid.	Royalty out-standing.	Total.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
Logs	6,653	394	7,047	5,795	321	6,116	.....	931	897	...	897	727	22	749	...	148	12,170	7,652	.....	4,518
Agar	20	...	20	73	.....	73	53	...	.....	...	.....	.....	...	.....	...	...	18	.....	.....	18
Poles	.....	...	.....	1,311	8	1,319	1,319	...	.....	...	.....	78	...	78	78	...	.....	.....	.....	.....
Posts and planks	348	1	349	93	9	102	.....	247	.....	...	.....	.....	...	.....	...	...	791	876	.....	115
Bamboos	5,29,775	...	5,29,775	6,93,318	34,750	7,28,068	1,98,293	...	2,80,550	...	2,80,550	2,58,325	8,700	2,67,025	...	13,525	2,99,595	1,80,782	.....	1,18,813
Canes	18,584	...	18,584	22,878	294	23 172	4,588	...	720	...	720	377	...	377	...	343	7,106	9,745	2,639	.....
Sungrass and reeds	1,28,890	...	1,28,890	40,080	.....	40,080	.....	88,810	.....	...	.....	.....	...	.....	...	...	12,57,626	14,83,478	2,25,852	.....
Charcoal	10	...	10	.....	.....	.....	.....	10	.....	...	.....	.....	...	.....	...	...	1,089	1,915	826	.....
Firewood	4,751	...	4,751	4,413	.....	4,413	.....	38	25	...	25	3,210	...	3,210	3,185	...	15,948	24,666	8,718	.....

Statement showing the Forest Produce exported via Diyangmukh Outpost and registered at that station during each month in the year 1885-86.

Months.	Dugouts.		Posts.		Oars.		Planks.		Pirahs.		Chariahs.		Rice-pounders.		Total.	
	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.
		Rs. As.		Rs. As.		Rs. As.		Rs. As.		Rs. As		Rs. As.		Rs. As.		Rs. As.
April 1885	1	6 0	27	6 8	11	12 8	3	0 8	...	.....	..	.....	...	.....	...	25 8
May "	7	82 0	58	40 10	6	3 10	34	9 10	3	1 5	...	.....	...	.....	...	137 3
June "	15	346 0	46	47 10	24	18 8	12	6 0	2	0 4	7	1 8	2	0 10	..	420 8
July "	5	119 8	11	11 0	18	18 0	8	2 0	...	.....	...	.....	...	.....	...	150 8
August "	11	214 0	32	21 8	14	17 0	..	.....	...	.....	...	.....	...	.....	...	252 8
September "	6	90 12	62	34 0	15	17 8	26	3 4	6	2 4	3	1 2	1	0 6	...	149 4
October "	2	40 0	4	2 0	...	.....	...	.....	...	.....	...	.....	...	.....	...	42 0
November "	9	141 0	46	39 10	...	.....	...	.....	...	.....	...	.....	...	.....	...	180 10
December "	5	100 8	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	100 8
January 1886	1	12 0	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	12 0
February "	2	14 0	20	20 0	...	.....	...	.....	...	.....	...	.....	...	.....	...	34 0
March "	4	84 0	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	84 0
Total	68	1,249 12	306	222 14	88	87 2	84	21 6	11	3 13	10	2 10	3	1 0	...	1,588 9

Appendix IX.—(*Concluded*).

Forest Produce passed at Pathorkandi, Kanairghat Revenue Stations and South Sylhet during each month in 1885-86.

Months.	Pathorkandi revenue station.										Kanairghat revenue station.										South Sylhet.									
	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sungrass and reeds.	Charcoal.	Firewood.	Dugouts.	Amount realised.	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sungrass and reeds.	Charcoal.	Firewood.	Dugouts.	Amount realised.	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sungrass and reeds.	Charcoal.	Firewood.	Dugouts.	Amount realised.
										Rs. As. P.										Rs. As. P.										Rs. As.
April 1885	15	3	....	5,350	88	2,918	..	..	..	70 11 9	..	..	....	....	..	....	..	..	..	.....	..	..	....	..	..	....	..	..	..	.....
May "	..	..	....	15,750	270	33,890	..	..	..	317 13 0	..	..	....	....	..	....	..	..	..	.....	..	..	....	..	..	....	..	..	..	.....
June "	..	..	86	59,200	305	175	..	..	..	239 4 0	..	..	....	....	..	....	..	..	..	.....	..	..	....	..	..	....	..	..	..	.....
July "	..	..	360	17,600	344	10,400	..	..	..	731 5 6	..	..	....	....	..	....	..	..	..	.....	..	..	....	..	..	....	..	..	..	.....
August "	120	2	18	29,900	766	5,933	..	16	..	459 4 4	..	..	....	....	..	....	..	..	..	.....	..	..	....	..	..	....	..	..	..	.....
September "	614	2	....	70,400	440	5,700	..	160	..	4,508 15 0	..	..	....	....	..	....	..	..	..	.....	..	..	....	..	..	....	..	..	..	.....
October "	300	..	77	38,750	1,041	900	..	148	..	1,205 6 0	..	..	....	....	..	....	..	..	..	.....	..	..	....	..	..	....	..	..	..	.....
November "	405	2	41	32,100	864	760	..	4	..	1,329 15 3	..	..	....	....	..	....	..	..	..	.....	..	..	....	..	..	....	..	..	..	.....
December "	10	.	32	16,600	213	7,225	..	..	..	120 11 0	16	..	7	2,675	..	..	..	32	4	48 0 0	..	..	....	.	..	....	..	..	..	.....
January 1886	..	11	60	6,250	74	187,725	..	..	..	590 8 0	..	..	3	....	..	....	..	..	..	27 15 9	..	..	....	..	..	....	..	..	..	.....
February "	9	39	....	19,450	312	10,800	..	..	..	172 10 0	13	..	....	100	5	....	..	67	1	4. 10 0	..	..	....	..	..	....	..	..	..	.....
March "	33	13	....	17,975	188	9,400	..	..	..	162 5 6	8	..	20	10,000	..	2,150	..	..	..	48 6 0	..	..	....	..	..	10,300	..	..	..	25 12
Total	1,506	72	674	309,425	4,905	275,736	..	328	..	10,208 13 4	37	..	80	12,775	5	2,150	..	99	5	169 15 9	..	..	....	..	..	10,300	..	..	..	25 12

Statement showing the Forest Produce removed from Government, Foreign, and Private Forests, in the Sylhet Division in the year 1885-86.

Revenue stations.	Locality.	Logs.			Agar.		Posts and planks.			Dugouts.			Bamboos.		Canes.		Sungrass and reeds.		Charcoal.		Firewood.	
		Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Amount.	Cubic feet.	Amount.	Number of maunds.	Amount.	Number of maunds.	Amount.
				Rs. As. P.		Rs. As. P.			Rs. As. P.			Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.
Pathorkandi.	Government—																					
	Protected forests	954	38,440	6,739 8 0	65	97 8 0	5	660	59 14 6	..	....	.....	247,825	618 13 0	4,092	255 12 6	189,151	369 13 6	....	8 0 0	152	4 12 0
	District forests	552	10,036	1,592 3 0	7	11 4 0	..	14	1 1 6	..	....	.....	61,900	154 12 0	814	50 14 0	86,585	237 1 4	....	2 0 0	176	5 8 0
	Foreign forests	2,509	25,095	.....	..	.....	..	....	.....	..	....	.....	182,825	.....	2,010	.....	4,038	.....	....	.....	226	.....
	Private "	1,174	21,930	.....	..	.....	..	....	.....	..	....	.....	907,567	.....	119	.....	326,151	.....	....	.....	5,284	.....
	Total	5,189	95,501	8,331 11 0	72	108 12 0	5	674	61 0 0	..	....	.....	1,399,817	773 9 0	7,035	306 10 6	605,925	606 14 10	....	10 0 0	5,838	10 4 0
Kanairghat.	Government forests	37	1,471	122 2 0	..	.....	9	30	2 5 6	5	61	4 12 3	12,775	31 15 0	5	0 5 6	2,150	5 6 0	....	.....	99	3 1 6
	Foreign "	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	..	.....	....	.....	....	.....	....	.....
	Private "	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	..	.....	....	.....	....	.....	....	.....
	Total	37	1,471	122 2 0	..	.....	9	30	2 5 6	5	61	4 12 3	12,775	31 15 0	5	0 5 6	2,150	5 6 0	....	.....	99	3 1 6
South Sylhet.	Government forests	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	..	.....	10,300	25 12 0	....	.....	....	.....
	Foreign "	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	..	.....	....	.....	....	.....	....	.....
	Private "	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	..	.....	....	.....	....	.....	....	.....
	Total	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	..	.....	10,300	25 12 0	....	.....	....	.....

SYLHET:
The 27th May 1886.

TARA KISOR GUPTA,
Sub-Assistant-Conservator of Forests, Sylhet Division.

Appendix X.

1	2		3		4		5		6		7		8		9		10		11		12		13	
Division.	Royalty on forest produce		Garkati.		Revenue from forests not managed by Government.		Miscellaneous.		Revenue realised by mauzadars.		Total revenue realised by the Forest Department.		Revenue realised by tahsildars.		Value of timber on lands taken up for cultivation.		Rubber.		Cassia *mahál.*		Lac *mahál.*		Total revenue realised by the Revenue Department.	
	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.	1884-85.	1885-86.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction	.....	.....	...	...	...	...	2	12	...	...	2	12	...	...	.....	.....	...	...	...	...	...	...	.....	.....
Gáro Hills	8,623	7,787	4,704	8,836	628	683	13	983	...	524	13,968	18,813	...	...	.....	.....	...	...	...	...	...	...	.....	.....
Goálpára	13,597	15,523	...	...	30	24	675	874	...	480	14,302	16,901	...	...	.....	.....	...	...	...	...	...	22	.....	22
Kámrúp	31,008	19,049	...	...	...	...	711	882	...	258	31,799	20,189	1,900	1,094	.....	979	...	...	...	...	20	...	1,920	2,073
Darrang	6,188	2,690	...	...	...	...	106	125	3,014	1,541	9,497	4,356	35	162	7,169	4,688	22,380	22,100	...	...	55	56	29,639	27,006
Nowgong.....	.....	2,220	...	...	...	...	...	...	...	1,565	.....	3,785	...	...	.....	9	...	128	...	..	...	249	.. ...	386
Sibságar	4,985	5,263	...	...	...	...	466	606	971	5,027	6,985	10,896	...	...	3,432	9,057	...	...	...	...	12	72	3,444	9,129
Lakhimpur	6,597	4,815	...	...	4	...	618	643	533	3,856	8,933	9,314	...	...	139	1,726	10,080	7,000	...	..	...	12	10,219	8,738
Cachar	30,332	30,456	...	...	2,720	5,253	569	683	...	...	33,621	36,392	...	33	4,751	2,408	850	1,850	...	...	...	...	5,601	4,291
Sylhet	7,273	16,221	...	...	...	...	23	402	...	...	7,296	16,623	...	...	1,520	514	...	...	...	...	...	...	1,520	514
Khási Hills.....	562	2,342	...	...	360	4,312	57	38	...	...	979	6,692	...	...	.....	.....	350	350	320	170	...	...	670	520
Nága „	18	4	...	...	...	...	...	...	...	...	18	4	...	...	.....	.....	...	...	...	...	...	...	.....	.....
Total.....	1,09,263	1,06,370	4,704	8,836	3,742	10,272	3,240	5,248	4,518	13,251	1,27,400	1,43,977	1,935	1,289	17,011	19,381	33,600	31,428	320	170	87	411	53,013	52,679

Resolution on the Assam Forest Report for 1885-86.

Extract from the Proceedings of the Chief Commissioner of Assam in the Revenue Department, No. 3,970, dated Shillong, the 4th November 1886.

READ—

The Report on Forest Administration in Assam during 1885-86.

RESOLUTION.

THE Forest Report is due on the 1st August, but the complete manuscript was not received in Press till the 1st September, and the printed report was not ready till the 20th October; a delay for which the accumulation of work in the Government Press must serve as an excuse. Mr. Gustav Mann was in charge of the department throughout the year. The main features of 1885-86, as a year of forest administration, were the continued success of the protective measures against fire in *sál* forests, the creation of the two new forest divisions of Nowgong and Sylhet, and an adverse balance-sheet at the end of the year, the deficit, however, being somewhat less than in 1884-85. It is partly due to prolonged slackness in the timber trade, and partly to the failure of the contract for working the *sál* forest at Dambu in the Gáro Hills.

Total area of forests.

2. The total area of forest lands in Assam is now 9,586 square miles, divided as follows between the three classes of reserved, protected, and district forests:—

	Area in square miles on the 31st March.	
	1885.	1886.
Reserved forests	2,342	2,332
Protected "	862	862
District "	6,390	6,392
Total	9,594	9,586

Reserved forests.

3. Reserved forests exist in every district except Lakhimpur and Sylhet. The following table gives details of this class of forests:—

District.	Area in square miles on the 31st March.	
	1885.	1886.
Gáro Hills	87	102
Goálpara	455	455
Kámrúp	122	126
Darrang	302	302
Nowgong	8	8
Sibságar	94	65
Nága Hills	487	487
Khási and Jaintia Hills	50	50
Cachar	745	745
Total	2,342	2,332

The Songsak reserve of 15 square miles was added in the Gáro Hills during the year, as also the Chhaygaon reserve of 4 square miles in Kámrúp: while 29 square miles were deducted in Sibságar, being the area of the Jhanzi reserve, which had been proclaimed by mistake, and was thrown open again to the Nágas.

Protected and district forests.

4. There was no change in the total area of protected and district forests, particulars regarding which were given in last year's review. The protected forests in Lakhimpur (459 square miles) are treated as reserves, pending regular steps for their transfer to that class.

Boundary work.

5. The following table shows the work done in 1885-86, in inspecting boundary-marks and clearing boundaries:—

Forest Division.	Total length of boundaries.	Length inspected.	Length cleared.	Total number of marks.	Number repaired.
Gáro Hills ...	117	102	117	159	159
Goálpára ...	88	74	88	421	345
Kámrúp ...	380	348	378	1,760	1,760
Darrang ...	30	21	18	197	197
Nowgong ...	56	56	56	483	343
Sibságar ...	114	102	102	230	16
Lakhimpur ...	134	106	128	1,076	546
Cachar ...	69	67	67	624	624

The Chief Commissioner notices that the repairing of boundary-marks was inadequately looked to in the Lakhimpur and Sibságar divisions, especially in the latter.

Surveys and working plans.

6. The principal survey of 1885-86 was that of the Dambu forest in the Gáro Hills; next in importance comes the survey work done in the Nowgong district. Under orders of the Government of India a new division of working plans was instituted during the year, to which the native surveyors have been attached. A trained officer from England was expected to take charge of this branch of the work, but it turned out that no man could be spared from last year's batch of young forest officers for Assam. Until the province is provided with such an officer, the working plans division will be one of rather precarious operation, and liable to be interrupted continually by the demands of district executive duties.

Protective measures.

7. There were 64 prosecutions (including 13 pending from 1884-85) for breaches of forest laws, against 55 the year before. In these 181 persons were concerned, of whom 123 were convicted. Forest thefts were the majority of the cases; damage by fire occurred in four instances, against 5 in the previous year. Protective measures against fire in the *sál* forests of Lower Assam were eminently successful; out of 140,602 acres brought under protection, only 4,641 acres were burned, and these nearly all in Kámrúp, where a single block of 3,000 acres, forming part of the Rani reserve, was swept by fire communicated from the grass lands of an adjoining village.

Plantations

8. The necessity for financial retrenchment precluded expenditure on plantations, which are not a very important branch of forest work in Assam, where natural reproduction goes on so easily. An attempt was made to induce *jhúming* cultivators to plant their *jhúms* with young timber trees supplied gratis by the forest officer, the cultivators being remunerated for their trouble by payment at the rate of Re. 1 for every 100 trees planted; but no great success has attended the experiment so far. The people are afraid that their *jhúming* area will be narrowed as the young forests grow up, and there is a difficulty about getting them to plant the trees the year before the *jhúm* is abandoned, which is what the forest officers aim at, as giving the young plants a better chance than they would have if left to themselves in perfectly waste land. The Conservator hopes that these obstacles may be overcome in time.

Roads and bungalows

9. The Dambu cart-road was finished. It is 24 miles long, and cost, on the whole, Rs. 1,000 per mile. No other important works were executed by the department, whether in roads or buildings, the year being one of strict economy in financial matters.

Working and outturn.

10. The system of working the forests and the rules under which permits are granted were explained in last year's review, and remained unchanged during 1885-86. As regards the outturn of timber (excluding minor forest produce), the following tables show the statistics of 1885-86 in comparison with those of 1884-85:—

Assam Valley and Hill Districts.

	1884-85.			1885-86.		
	Reserves. Cubic feet.	Protected and district forests. Cubic feet.	Total. Cubic feet.	Reserves. Cubic feet.	Protected and district forests. Cubic feet.	Total. Cubic feet.
Logs of *sál* wood	80,280	20,910	107,190	63,855	35,467	99,322
Ditto other first-class wood.	13,800	53,370	67,170	13,707	173,353	187,060
Ditto second-class wood.	44,040	92,490	136,530	26,386	413,792	440,178
Total logs	138,120	172,770	310,890	103,948	622,612	726,560
Poles	22,800	12,740	35,540	21,598	21,270	48,868
Boats	325	26,775	27,100	360	33,540	39,000
Dead wood	69,750	68,460	138,210	75,875	29,236	105,111
Total	138,210	107,975	200,850	97,833	90,046	187,879

Surma Valley.

	Government forests.	Foreign forests.	Private forests	Government forests.	Foreign forests.	Private forests.
Logs	254,559	25,922	268,491	267,766	54,417	207,680
Posts and planks	2,491	.....	1,775	5,401	96	2,201
Firewood	9,710	50	31,896	75,297	6,872	77,135
Total	266,760	25,972	302,162	348,644	61,385	287,016

The outturn of *sál* has thus fallen from 107,190 to 99,322 cubic feet, a result which is due partly to the dullness of the trade, and partly to the charges made by certain

zamindars of Goálpára for the stacking of timber on their land. These disputes have compelled the Government to take up lands for that purpose under Act X. of 1870. The outturn of first-class and second-class timber from the forests of Upper Assam, on the other hand, has largely increased, showing that the local demand is developing itself vigorously, and that the forest rules are well adjusted to it. In the Surma Valley the increased outturn from Government forests occurs chiefly in Sylhet, where the forests are only now being opened up. Private forests continue to show signs of exhaustion. The larger import of foreign timber marks a revival of the trade from Manipur to Cachar.

Receipts of the department.

11. Divided in the same way as in 1884-85, the receipts of the Forest Department for 1885-86 appear as follows :—

	1884-85. Rs.	1885-86. Rs.
Royalty	1,09,263	1,06,370
Garkati	4,704	8,336
Duty on imports	3,742	10,272
Miscellaneous	3,240	5,248
Total collected by Foreign Department ...	1,20,949	1,30,726
Collected by tahsildars and mauzadars	8,386	14,550
Value of timber on waste land grants	17,011	19,381
Rubber-mahâls	33,660	31,428
Cassia "	320	170
Lac "	87	411
Total collected by Revenue Department ...	59,464	65,930
Grand Total ...	1,80,413	1,96,656

The improvement in receipts amounts to Rs. 16,243, and is due to a more extensive use of trading permits in district forests, to large grants of garkati permits in the Gáro Hills, and to the increased import of Manipuri timber which has been noticed above. Royalty dues, however, which are the mainstay of forest revenue, remain at a low figure in consequence of the absence of demand for *sál* timber in the Calcutta market.

Expenditure.

12. The expenditure of 1885-86 is shown below under the prescribed departmental heads .—

Budget heads.	1884-85. Rs.	1885-86. Rs.
A.—Conservancy and Works.		
I. Timber and other produce removed from the forests by Government agency.	2,687	1,539
II. Ditto ditto by consumers and purchasers.	6,071	6,595
III. Drift and waif wood and confiscated forest produce ...	68	63
VI. Live and dead stock	13,990	11,297
VII. Communications and buildings	24,067	28,350
VIII. Demarcation, improvement, and extension of forests ...	43,083	39,502
IX. Miscellaneous	4,773	5,159
Total of A.—Conservancy and Works ...	94,739	92,485
B.—Establishments.		
I. Salaries	82,970	95,879
II. Travelling allowances	16,295	18,178
III. Contingencies	3,695	4,952
Total of B.—Establishments ...	1,02,960	1,19,009
Grand Total of Expenditure	1,97,699	2,11,494

The Dambu cart-road accounts for the increase of Rs. 4,283 under Communications. This is an item of expense which will not recur as a charge against the Forest Department, as the road has now been made over to the department of Public Works. Under Salaries and Travelling Allowances there are increases of Rs. 12,909 and Rs. 1,882

respectively; this is because no furloughs were granted in 1885-86, while regular departmental promotions, involving higher pay to officers, took place during the year. Among the forest divisions, those of Lower Assam (Gáro Hills and Goálpára) show by far the heaviest deficit (Rs. 49,211), which, of course, occurred on the *sál* forest, for reasons already explained. Cachar and Sylhet show a considerable surplus, which may be exxpected to increase as the Sylhet forests are brought more thoroughly into the sphere of work.

The deficit in the department on the results of 1885-86 amounted to Rs. 14,837, against Rs. 17,286 at the close of the preceding year.

By order of the Chief Commissioner of Assam,

E. STACK,

Offg. Secretary to the Chief Commissioner of Assam.

A.S. Press (Revenue) No. 85—450—4-11-86.

No. 175F., dated Calcutta, the 8th March 1887.

From—SIR E. C. BUCK, *Secretary to the Government of India,*
To—*The Chief Commissioner of Assam.*

I AM directed to acknowledge the receipt of your letter No. 3989, dated the 6th November last, submitting the Progress Report of Forest Administration in Assam for the year 1885-86, together with your Resolution thereon.

The date fixed for the submission of the Conservator's Report seems, in Assam, to be the 1st August, and, though this is a month later than the date prescribed in several of the larger Provinces, the Government of India regrets to observe that you were not in possession of the complete manuscript before the 1st September, although no reasons have been assigned by the Conservator for the delay reported. I am now to ask whether any special reason exists why the Annual Report should not, under ordinary circumstances, be submitted to you by the 1st July.

2. Assam contains extremely extensive forest areas and waste areas of uncultivated lands, in possession both of the State and of private parties, and, under these circumstances, the benefits, and more especially the direct benefits, derivable from the State Forest property are, to a great extent, a question of the future. The present duty of the Forest Administration consequently consists mainly in carrying out such measures as will ensure a sufficient area of forests being hereafter found in a fit state to meet any increasing demands, which will certainly arise. You will probably agree that the permanent security of the possession of the necessary forest area and its unfettered use by the State are the only safe foundations on which a sound system of Forest Conservancy can be based; and that the only thoroughly efficient way in which these objects can be effected is by the formation of Reserves, with reliable demarcation, and the maintenance of boundaries, supplemented by fire-conservancy and a general protection of the property.

Under these circumstances, it is to be regretted that the formation of Reserves has not made more rapid progress of late years. A certain amount of protection is doubtless afforded by the rules promulgated for Protected and District Forests; but these rules permit of the growth of privileges adverse to forest interests, and are otherwise insufficient to ensure that the forests administered under them shall be worked to the best advantage.

3. The changes which took place during the year under review in the constitution of the State Forest property are exhibited in the following table:—

CLASS OF FORESTS.	AREA, IN SQUARE MILES.				Proportion of Forests to whole area of Province (45,838 square miles).
	At the commencement of the year.	Added.	Excluded.	At the close of the year	
					Per cent.
Reserved Forests . . .	2,342	19	29	2,332	5
Protected " . . .	863	...	...	863	2
District " . . .	6,390	85	83	6,392	14
TOTAL .	9,595	104	112	9,587	21

Nineteen square miles were added to the area of Reserves, 14·5 square miles being in the Garo Hills Division and 4·3 in the Kamrup Division; but, on the

other hand, 29 square miles were excluded in the Sibsagar District, because large privileges were claimed in them by independent tribes of Nagas.

4. The area of Reserves thus actually decreased during the year under review; but it is satisfactory to notice that upwards of 700 square miles have been gazetted under Section 4 of the Forest Act, and that the procedure towards their final settlement is in various stages of progress. For the Langai and Singla Forests, comprising 170 square miles, the Settlement Report has been submitted and only requires the Chief Commissioner's final sanction; and for those in the Lakhimpur District, aggregating 251 square miles, the work in which had been delayed for want of a Settlement Officer, the Deputy Commissioner has been appointed as such.

An additional area of 300 square miles has also, it seems, been inspected and selected for future reservation, and of these an addition to the Bijni Reserve, comprising 100 square miles, has been gazetted under Section 4 of the Forest Act since the close of the year, thereby increasing the area awaiting final settlement to upwards of 800 square miles. The Conservator's Report would gain considerably in interest and value if the paragraphs treating of reservation and demarcation contained a short statement, from which the existing state of the settlement and boundary work could be gathered at a glance, and which should show more specially the names and extent of areas awaiting settlement, inclusive of those which were gazetted under Section 4 in years previous to that under report. As it is, a constant reference to former Reports is required in order to gain a clear insight into the progress of the work.

5. Considering the difficulties which exist with regard to the maintenance of boundaries in a forest country like Assam, the work done is sufficiently commendable. Eight hundred and seventy-six miles of boundaries were inspected by the Divisional Officers themselves. Out of a total length of 988 miles, 954 miles were cleared, and 3,990 boundary-marks were repaired.

The total length of boundaries and the total number of boundary-marks as given in Appendix II of the Reports for 1884-85 and 1885-86, respectively, differ considerably, and it is not always possible to account for such differences by the changes which have taken place in the constitution of forest areas, nor from the part of the Report treating of Area and Boundaries.

6. A detailed survey of the Dambu Reserve in the Garo Hills, containing 6·82 square miles, was undertaken and completed by the Divisional Officer, in addition to his current work, at a cost of R177 per square mile. In addition to this, considerable boundary surveys have been carried on by Divisional Officers. The length of these boundaries has not, however, been given, except in one case, when the survey is stated to have cost R86 per linear mile. No mention having been made to the contrary, it is presumed that the surveys reported were mere boundary surveys, without any interior topographical details; and if this is the case, the cost of the Lakhimpur Survey is so excessive as to warrant the enquiries instituted by the Conservator.

7. A Working-Plans Division was formed during the year; but, as no special Officer was available, it was placed under a Divisional Officer, in addition to the current duties of the Division. Since then it has been found possible to strengthen the Assam Forest Staff. The demands made on most of the Assam forests are as yet so far below their capabilities that Working-Plans on the most general lines will mostly suffice to meet all practical necessities, and more elaborate Plans should only be prepared for forests in which the demand warrants such a step. His Excellency the Governor General in Council is pleased to observe that the submission of annual Plans-of-Operations is insisted upon, and that they are, as a rule, adhered to.

8. The number of cases of breaches of the Forest Law during the year under review compare as follows with those of the previous year:—

Year.	Number of New Cases.			Proportion of Convictions to total number of Cases decided by the Courts.
	Taken into Court.	Compounded.	Total.	
				Per cent.
1885-86	51	79	130	67
1884-85	55	34	89	69
Increase or decrease in 1885-86	—4	+45	+41	—2

The number of cases compounded under Section 67 of the Forest Act has more than doubled, and the fines realized under this Section represent upwards of five times the amount realized in the previous year. Compared with the extent of forests under the administration of the Forest Department, the aggregate of the breaches of forest rules is insignificant; but the main reason for this is that the agricultural population can satisfy their demands in respect of minor forest produce almost entirely free of charge, and their requirements in wood at almost nominal rates.

9. The success of the year's fire-protection, as compared with that of the previous year, is exhibited in the following table:—

Year.	Area attempted.	Failures.	Area protected.	Proportion of Failures to area attempted.	Cost		Proportion of area under Fire-protection to total area of Reserves.	Year when Fire-Conservancy commenced.
					Per square mile protected.	Per acre protected		
	Sq. ms.	Sq. ms.	Sq. ms.	Per cent.	R	Pies.	Per cent.	
1885-86 . .	234	7	227	3	39	12	10	1873
1884-85 . .	210	11	199	5	52	16	9	
Increase or decrease in 1885-86 . .	+24	—4	+28	—2	—13	—4	+1	—

The area the fire-protection of which was attempted has been increased by 24 square miles, and both failures and cost of the operations have been considerably reduced. The season was not specially favourable for fire-protection, and His Excellency in Council is all the more pleased to notice that the improvement in fire-protection in Assam, which was remarked upon in the review of last year's Report, has been more than maintained.

The present Report gives the area of Reserved Forests which are not liable to conflagrations, and which, therefore, require no special measures to protect them, as 1,611 square miles.

10. Natural reproduction in the fire-protected forests of Assam is all that can be desired, and artificial measures can only be needed when it is desirable to change the character of the forests or to introduce a new species. Planting operations in Assam are very expensive, and the "*taungya* system," by which large areas are treated in Burma, has not as yet found favour in the eyes of the Assamese *jhum* cultivators, who fear that they will gradually plant themselves out of the area in which they are now still allowed to follow their savage method of cultivation. This is but natural, and till the "*taungya* system" is, as in Burma, located in Reserves, where the people know that they would not

be allowed to *jhum* under ordinary circumstances, no success need be hoped for.

The detailed accounts regarding plantation work in Assam, given in the body of the Report, and more especially in Appendices III and IV, have been read with great interest. The sums invested in Rubber Plantations in Assam aggregate a considerable total, amounting apparently, as separate from the cost of fire-protection and supervision, to upwards of R91,000, or R76 per acre. The experimental tappings of 50 selected Rubber trees, described in Appendix V, have now been carried on for four years; and as the progress of the existing plantations has been from the outset recorded with great accuracy and detail, it will probably be possible to make a fairly reliable estimate with regard to the rental value of Rubber Plantations. I am therefore to suggest that a detailed statement of the whole cost of each Rubber Plantation, including cost of special fire-protection, &c., be submitted, and that an estimate be framed regarding its probable cost of maintenance, exploitation, and income.

11. The extension of serviceable forest roads is essential to the successful working of almost every forest, and the Governor General in Council is therefore pleased to observe that the work on the Dambu cart-road was proceeded with in spite of the strict economy which otherwise prevailed. This road opens out one of the richest forest tracts in the Garo Hills, and in a country like Assam, where the State forests have frequently to compete with more favourably situated areas, it is necessary to bring them, by the construction of improved means of communication, into nearer touch with the market.

12. The outturn of the Assam forests in timber, fuel, and bamboos was as follows:—

Class of Forests.	Timber (selection fellings).	Fuel.	Bamboos.
Reserved Forests.	Cub. ft.	Cub. ft.	No.
By Government Agency	1,476	...	...
„ Purchasers	349,078	17,754	565,224
Free Grants	20,152	10,000	1,700
Total	370,706	27,754	566,924
Protected Forests.			
By Government Agency	...	...	...
„ Purchasers	43,377	50	248,925
Free Grants	17,710	...	...
Total	61,087	50	248,925
District Forests.			
By Government Agency	1,872	..	...
„ Purchasers	343,151	82,759	182,973
Free Grants	422,158	309,103	1,406,562
Total	767,181	391,862	1,589,535
GRAND TOTAL IN 1885-86	1,198,974	419,666	2,405,384
„ „ IN 1884-85	802,949	84,581	818,166
Increase in 1885-86	396,025	335,085	1,587,218

The outturn by direct Government agency is insignificant. It is noticed that some 460,000 cubic feet of timber were removed under free grants, out of a total yield of 1,199,000 cubic feet; and that 319,000 cubic feet of fuel were similarly given away, out of a total of 420,000 cubic feet which the forests supplied; also 1,408,000 bamboos, out of 2,405,000. This shows that more than half of the yield of the State forests was surrendered free of charge.

The produce extracted under free grants was mostly obtained from District Forests, and it is doubtless the right policy to treat the inhabitants, especially of villages situated in or near the Government Forests, with considerable liberality; but, at the same time, the fact must not be lost sight of that a permanent local market is of great importance to a sound system of Forest Administration, in view of the circumstance that a considerable portion of the revenue derivable from forest property has to be spent on its supervision, protection, and management. Financial success becomes impossible when by far the greater portion of the produce of a forest not only yields no revenue, but, on the contrary, involves considerable charges under supervision and control. These considerations furnish, in the opinion of the Government of India, a strong argument in favour of extending the formation of Reserves more energetically than has been the case of late. In these Reserves, free grants should, in the absence of established rights, only be granted under exceptional circumstances and after careful consideration of each case.

As regards timber removed by purchasers, it is noticed that the extraction of sâl logs for export to Bengal has still further decreased; but, on the other hand, a considerable increase has taken place in the exploitation of timber used in the Province, and the Conservator believes that there is now every prospect of a revival of the trade in sâl timber as well.

13. The outturn of minor forest produce is exhibited as follows:—

Class of Forests.	Rubber.	Canes.	Thatching Grass.
	Maunds.	Bundles.	Bundles.
Reserved Forests.			
By Government Agency	8	...	...
„ Purchasers	...	37,684	...
Free Grants	...	78	...
Total	8	37,762	...
Protected Forests.			
Nil.			
District Forests.			
By Government Agency	7	...	...
„ Purchasers	...	405,523	...
Free Grants	...	21,137	2,700
Total	7	426,660	2,700
GRAND TOTAL	15	464,422	2,700

The sale of Rubber Mahals realized R31,428. The imports of Rubber are recorded as 983 maunds and the exports as 6,658 maunds, showing that 5,675 maunds were collected locally. This represents a considerable decrease as compared with last year's work, when the local collections amounted to 7,290 maunds.

14. The financial results compare as follow with those of 1884-85 :—

Year.	Receipts	Charges.	Deficit.
	R	R	R
1885-86	1,96,657	2,11,494	14,837
1884-85	1,80,413	1,97,700	17,287
Increase or decrease in 1885-86 . . .	+16,244	+13,794	—2,450

The Receipts have slightly increased, but the Charges are also higher, and the Deficit is only R2,450 less than in the previous year.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

PROVINCE OF ASSAM

FOR THE YEAR

1886-87.

BY GUSTAV MANN, ESQ.,

CONSERVATOR OF FORESTS, ASSAM.

SHILLONG:
PRINTED AT THE ASSAM SECRETARIAT PRESS.

1887.

No. 85A.

FROM GUSTAV MANN, ESQ.,

Conservator of Forests, Assam,

TO THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM,

Dated Shillong, the 20th June 1887.

SIR,

I HAVE the honour to submit the Annual Forest Administration Report for the year 1886-87.

I have the honour to be,

SIR,

Your most obedient Servant,

GUSTAV MANN,

Conservator of Forests, Assam.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN ASSAM

For the year 1886-87.

By GUSTAV MANN,

Conservator of Forests, Assam.

INTRODUCTION.

THE year under report has been one of very strict economy in all forest expenditure on account of the falling off in forest receipts during the previous years.

2. The energies of Forest Officers and their subordinates have, under these circumstances, been directed chiefly to the extension of Government reserved forests and to improving the protection of existing ones.

3. The area of reserved forests finally gazetted during the year, under Section 19 of the Indian Forest Act, was 375·10 square miles, and the area proposed under Section 4 was 122·05 square miles, whilst the necessary preliminary inspections and enquiries regarding further areas to be proposed amounted in the aggregate to 77 square miles.

4. The careful survey of the valuable Sâl forests in the Gáro Hills was continued, to obtain accurate maps showing the existing classes of forests and their extent, as well as all other topographical details of the areas. These maps will form the basis for the working plans to be prepared.

5. With the same view, valuation surveys of the growing stock were carried on in the Dambu forest, in the Gáro Hills, thus making the information necessary for preparing a working plan for this forest complete.

6. The protection of existing reserves has been, as hitherto, ensured by a proper maintenance of all boundaries and efficient patrolling by the forest guards. The Divisional Officers inspected 783 miles of boundary lines out of a total length of 1,040 miles.

7. The fire-protection during the year was extended by 52,697 acres, and has again been most successful, with but a slight increase in expenditure.

8. The improvement of the revenue control has received the closest attention, and every encouragement, consistent with safety, has been given to purchasers to remove trees from the Government forests, which resulted in an increase of the revenue by Rs. 15,354.

9. Forest offences, although slightly more numerous than in the previous year, continue to be insignificant, considering the large area of forests which is being protected.

10. The want of funds has prevented extensions of plantations, but the existing ones are kept up most efficiently, and could not be better than they are.

11. Roads and buildings have also been duly attended to, but much new work could not be attempted, as restriction in expenditure was imperatively called for.

12. The yield of the forests increased, and particularly so that of Sâl, plainly showing the revival of the export trade in this timber.

13. The financial results of the year's working have been a small deficit of Rs. 276. It was hoped to have had a surplus this year; but the necessity for accepting part payments of revenue from the timber-cutters to encourage them to work and to prevent their having to resort to money-lenders made this impossible. There is, however, perfect safety as regards the payment of this outstanding revenue in the current year.

CHAPTER I.—Area and Boundaries.

Area of reserved forests.

14. The comparative slackness in extending the formation of reserves during the two preceding years has been compensated for by the gazetting of 375 square miles, under Section 19 of the Indian Forest Act, as Government reserved forests in the year under report.

15. The following statement shows the areas declared reserves in the respective districts:—

Name of district.	Name of mauza or other sub-division.	Name of forest.	Area.
Gáro Hills	Mauza No. 1	Bagmara	12,320
Goálpára	Bijni Duár	Bijni Duár	75,526
Ditto	Ripuduár	Panbari and Pechadaveri	3,290
Ditto	Chirang and Sidli Duár	Bhur	3,855
Nowgong	Mikirpára mahál	Diju	3,012
Ditto	Duár Salona	Suang	1,924
Ditto	„ Bamuni	Bamuni	499
Ditto	Rangkhang	Rangkhang	6,339
Ditto	Gobha	Sonaikusi	10,754
Lakhimpur	Lornah	Dehingmukh	13,747
Sylhet	Karimganj	Langai and Singla	108,800

16. The Bagmara reserve consists chiefly of mixed lower hill forest and Sâl, and it was selected to ensure a permanent timber supply to a part of the densely-inhabited district of Mymensingh, immediately south of the Gáro Hills, which is almost entirely without forests.

17. The Bijni reserve consists of mixed plains forest and Kair (*Acacia Catechu*) which latter is comparatively scarce in this Province. It has been reserved chiefly for the growth of this tree.

18. The Panbari and Pechadaveri, as well as the Bhur Forest, consist both of Sâl.

19. The Diju, Suang, Bamuni, Rangkhang, and Sonai Kusi reserves are mixed lower hill forest with more or less Sâl in them.

20. The Dehingmukh reserve is a mixed plains forest, like most other forests in the Lakhimpur districts, with the more valuable kinds in fair proportions and easily worked, being bounded on three sides by large rivers well suited for timber transport.

21. The Langai and Singla reserve consists chiefly of mixed lower hills and plains forests; it is almost the only area left in Sylhet with mature trees on it.

22. The different additions to, and small areas excluded from, the reserves, as well as the total area of Government reserved forest in Assam at the close of the year under report, are shown in the Tabular Statement No. 49, and the boundaries of the newly-added reserves and the privileges granted in them are recorded in the register of reserves, a copy of which accompanies this report as Appendix I.

23. The area excluded from reserves consists of 75 acres only, the result of a slight rectification of boundary made in the Rani reserve in the Kámrúp division, by which 35 acres were excluded, and 40 acres were given up for the same reason from the Deṣai reserve in the Sibságar division.

24. The following table shows the state of the forest settlements in the Province at the close of the year, as ordered by the Government of India in paragraph 4 of the review of last year's report:—

Area of proposed reserves under settlement

Number.	Name of forest.	Area in acres.	Name of district.	Year when proposed by Conservator.	Year when gazetted under Section 4 of the Indian Forest Act.	Reason for non-settlement during the year 1886-87.
1	Bharalwah	6,400	Lakhimpur ...	1884-85	1884-85...	Forest Settlement Officer's time was taken up by other duties.
2	Kuddum	12,800	Ditto ...	"	" ...	
3	Parapara	18,016	Ditto ...	"	" ..	
4	Upper Dehing	74,880	Ditto ...	"	" ...	
5	Jokai.....	8,960	Ditto ...	"	" ...	
6	Jaipur	25,920	Ditto ...	"	" ...	
7	Kaliani	51,840	Nága Hills ...	1885-86	1885-86...	
8	Diphu	42,080	Ditto ...	"	" ...	
9	Rengma	34,400	Ditto ...	"	" ...	
10	Dayang.....	60,875	Sibságar ...	"	" ...	
11	Second addition to the Charduár reserve.	32,000	Darrang ...	"	1886-87...	Fresh complications about boundaries of adjoining private lands.
12	Addition to the Kholahat reserve.	14,970	Nowgong ...	"	" ...	Difference of opinion between the Deputy-Commissioner and the Conservator.
13	Addition to the Deboka reserve.	28,494	Ditto ...	"	" ...	Ditto ditto.
14	Makum	2,649	Lakhimpur ...	1886-87	" ...	Forest Settlement Officer's time was taken up by other duties.

25. It will be seen from the above statement that there has not been any delay in the gazetting of the proposed reserves under Section 4 of the Forest Act, and the appointment of the Forest Settlement Officer. The delay which has occurred was rather in the submission of the reports by Forest Settlement Officers, whose time was often fully taken up by other duties, and they had not unfrequently to be changed several times before the forest settlement could be attended to.

26. As regards the state of demarcation, this has in every instance been completed by temporary posts and mounds and the clearing of the lines.

Area of protected forests

27. The addition to the area of protected forests during the year has been 158,322 acres, or 247 square miles, in the Sylhet district, and 196,800 acres, or 308 square miles, in the North Cachar Hills; but this latter is in reality not an addition, but an error in the calculation made in Statement No. 49 in 1883-84.

28. As regards the newly-declared protected forests in Sylhet, it must be explained, however, that some of this area is not Government land, and that there are many claims made to different portions of it. There being so extremely little forest left in the Sylhet district, and this little in a fair way of being exterminated, it was considered desirable in the general interest of the people to afford as much protection as possible to these areas, and to do this the simplest plan was to gazette them as protected forests.

29. In justification of this policy, it has to be remarked that most of the Government forests and waste lands in the Sylhet district are claimed by some one or another, simply because, as these people say themselves, they cannot lose by doing so, and might probably gain as others had done before them, in consequence of the great liberality always shown by Government in matters of waste lands and forests in this Province.

30. The area excluded from protected forests during the year was 123,447 acres, or 193 square miles. Of this, 122,547 acres, or 192 square miles, were gazetted as reserves, and 900 acres, or one square mile, was given up for permanent cultivation.

Area of unclassed State forests and waste lands.

31. The only addition to unclassed State forests and waste lands consists of the 35 acres excluded from the Rani reserve in the Kámrúp division, and 40 acres excluded from the Desai reserve in the Sibságar division in consequence of rectifications of their boundaries.

32. The area excluded from the unclassed State forests and waste lands is 175,843 acres, or 275 square miles, of which 117,519 acres, or 184 square miles, were added to the reserves; 54,633 acres, or 85 square miles, made protected forests, and 3,691 acres, or 6 square miles, were allotted for permanent cultivation.

Land acquired by payment of compensation

33. The compensation paid during the year in the Goálpára and Gáro Hills divisions on account of land taken up for timber depôts to protect the daffadárs or wood-cutters working for this department against the imposition of the *thaljat* tax, levied by the zamindárs in the Goálpára district, was as follows:—

Name of depôt.	Area in acres.	Amount paid. Rs.
Marnoi	8	500
Bogribari	25	500
Bilasipára	4	80
Chanderdinga	8·5	170
Champamati	1·2	100
Kokrajhar	2·5	100
Total		1,450

34. In the Cachar division Rs. 1-12-6 were paid for land on which huts for forest guards for a new patrolling post were built.

Boundary work

35. The proper maintenance of all demarcated boundaries of reserved forests has received the most careful attention, as heretofore. The tabular statement, Appendix II. of this report, shows the work done in the fullest detail. The total length of artificial boundaries and demarcated natural boundaries has increased from 987 to 1,040 miles, and, of the latter, 783 miles were inspected by the divisional officers.

The boundary-marks have been increased from 4,950 to 5,113, of which 4,774 were repaired during the year.

The expenditure on demarcation work came to Rs. 5,821, as compared with Rs. 9,018 spent in the previous year. This reduction is partly due to there having been less original work in the year under report; but the chief cause was the necessity for enforcing the utmost economy on all works, because of the falling off in the receipts during the previous year.

Demarcation work has become a very considerable item of expenditure in this department, which has induced the Conservator to call on all Divisional Officers carefully to consider the possibility of reducing it, wherever this can be done without lessening the efficiency of the demarcation. The lines will always be kept open, so as to be easily recognisable, but not more, and in two divisions, Sibságar and Lakhimpur, the boundary-marks are very numerous, and so close together that a reduction in their number can be effected without danger of encroachment, now that these boundary lines are well known to all the people in the neighbourhood.

Account of changes in area and boundary work according to divisions.

36. The changes in area, the differences in the total length of boundaries, and the total number of boundary-marks as well as the demarcation work done generally in the different divisions were the following.

Gáro Hills division

37. The Bagmara reserve, comprising an area of 19·25 square miles, was the only area added to the reserve forest in the Gáro Hills. A thorough inspection and preliminary enquiries by the Deputy-Commissioner were made also regarding the Angratoli forest in this district, comprising an area of about 14 square miles, and the Conservator hopes to submit his proposals on an early date for the orders of the Chief Commissioner.

There are no protected forests in the Gáro Hills division.

38. The area of unclassed State forests and waste lands has been decreased during the year by 19·25 square miles declared reserve.

39. The length of demarcated boundary-lines of reserves in the Gáro Hills has increased from 117 to 131 miles, which change is due to 17 miles of new demarcation in the Rongrengiri and 9 miles in the Songsak reserve, the latter in consequence of re-measurement, whilst 12 miles less were demarcated in the Dambu and Darugiri reserves. These were natural boundaries, for the clearing of which there was no longer any necessity.

The increase of 17 new boundary-marks is also due to re-survey and new demarcation.

Owing to press of work in the Working Plans Division, the inspection of boundaries could not be carried out by Mr. Campbell, the divisional officer, but had to be left to Mr. Kelly, which accounts for all boundary-lines not having been inspected this year.

40. The expenditure on demarcation work in the Gáro Hills division during the year has been Rs. 839-6-6, of which Rs. 20-8 were spent on temporary demarcation of the Angratoli forest, above alluded to, and Rs. 12 on the demarcation of the Damra depôt. This leaves Rs. 806-14-6 for the 131 miles of boundary, or Rs 6-2-6 per mile, which is not excessive, considering the high wages which have to be paid to the Gáros.

Goálpára division

41. The area added to the Government reserved forests in the Goálpára division was 129 square miles, and the forests east of the Sankos river, immediately at the foot of the Bhutan Hills, were inspected by the Deputy-Commissioner of the district and the Divisional Forest Officer, with a view to having them also proposed as reserves on an early date.

42. The area of unclassed State forests and waste lands has decreased by 129 square miles, which were gazetted as reserves in this division during the year.

43. The total length of demarcated boundary-lines increased from 88 miles to 97, which is accounted for by the addition of the boundaries of the new Bijni and Bhur reserves; 46 new boundary-marks were added also in these two reserves.

44. In the Sidli reserve the keeping up of 76 boundary-marks around deserted cultivation was discontinued during the year, as there is apparently no chance of these lands being re-occupied for many years to come. The Meches have a liking for changing their lands, which the great abundance of land in the Eastern Duárs and scanty population enable them to do.

45. The demarcation of the Bhur reserve was done in the usual manner by mounds and numbered posts; but in the case of the Bijni reserve prism stones placed on mounds were used, because this boundary is also the northern boundary of the zemindári lands; half the cost of this demarcation was paid by the Revenue Department and half by the Forest Department, by order of the Chief Commissioner.

46. All boundary-lines were cleared and inspected by the Divisional Officer, and the boundary-mounds repaired, where necessary.

47. The demarcation of the Bijni reserve was not paid for during the financial year, the bill not having been received from the Revenue Department, and the clearing of the lines of the Panbari an Pechadaveri reserve was charged by mistake to fire-protection, whilst Rs. 58-2-5 were paid for demarcation of timber depôts. This leaves an expenditure of Rs 104 on about 74 miles, or Rs. 1-6-5 per mile, which is very little, and accounted for by the fact that Mr. Copeland succeeded in getting the ryots to clear these boundaries near their villages. He granted them free firewood, dead posts, &c., &c., from the reserves for their services, which is very satisfactory.

Kámrúp division

48. There has been no change in the area of reserves, protected and unclassed State forests, and waste lands, in the Kámrúp division, except that 35 acres were excluded from the Rani reserve on account of a slight rectification of its boundary.

49. The total length of demarcated boundary-lines is 381 miles, or about one mile more than in the previous year, which is due to additional demarcation in the Barduár reserve; and, out of these, 298 miles were inspected by the Divisional Officer. Illness prevented his inspecting more, but the forest-ranger was sent and inspected the remaining portion of the lines.

50. The total number of boundary-marks comes to 1,757, which is 3 less than in the previous year; these were done away with in the Pantan reserve. All boundary-marks were repaired where necessary.

51. The expenditure on boundary work has been almost the same as in the previous year. It was Rs. 403, as compared with Rs. 394 spent in 1885-86, or little more than one rupee per mile. This very cheap work is the result of arrangements made with villagers to clear the boundary-lines in return for free grants of dead posts, firewood, bamboos, &c., &c., from the reserved forests, as has been the practice in this division for several years now.

Darrang division

52. There has been no change in the area of reserved forests in the Darrang division, and there are no protected forests. The area of unclassified State forests and waste lands was lessened by 211 acres, allotted for permanent cultivation under the 30 years' Lease Rules of 1876 and ordinary patta rules.

The proposed addition to the Charduár reserve was not settled before the close of the year.

53. The length of demarcated boundary-lines in the Darrang division is only 29 miles, which were all cleared; but the Divisional Officer was, by a serious accident, prevented

from walking or riding for nearly three months, which accounts for not more than 12 miles having been inspected by him. The number of boundary-marks was reduced by 5 in the Garumari reserve as not necessary, and one was added in the Charduár reserve.

54. The total expenditure on boundary work during the year in the Darrang division was Rs. 297-3-9, of which Rs. 120-4 were paid for clearing the boundaries of the proposed addition to the Charduár reserve, not as yet shown in the demarcation statement, which leaves about Rs. 177 for the remainder of the boundary work, or Rs. 49 more than was spent in the previous year. This is about Rs. 6 per mile.

Nowgong division

55. In the Nowgong division 22,528 acres, or 35·2 square miles, were added during the year to the Government reserved forests, and 8,960 acres, or 14 square miles more, were gazetted under Section 4 of the Indian Forest Act, and are now under settlement.

Besides this, the Divisional Officer has inspected some 12·5 square miles of forests, and reported on them. Regarding these, the Conservator hopes to submit early proposals for the sanction of the Chief Commissioner.

56. There are no protected forests in the Nowgong division, and the area of the unclassed State forests and waste lands has decreased by 22,528 acres, or 35·2 square miles, gazetted as reserves.

57. The boundary work in this division consists of 72 miles of demarcated boundary-lines, 70 miles of which were cleared and 66 miles inspected by the Divisional Officer, whilst out of 628 boundary-marks 585 were repaired.

The total length of demarcated boundary-lines exceeds that of last year by 16 miles, and the total number of boundary-marks, as compared with that of last year, is 145 more. This increase is entirely due to additional demarcation of the newly-declared reserves, and also of those still under settlement.

58. The expenditure on boundary work during the year under report has been Rs. 308 in the Nowgong division, which is Rs. 680 less than was spent in the previous year, even though the length of boundaries and number of boundary-marks have increased. No doubt much of last year's expenditure was due to original work, but still this reduction in the cost of the work is very satisfactory.

The Divisional Officer explains that this saving was effected by giving task work to daily labourers, and by having got the villagers living in the neighbourhood of reserves to clear the boundaries in return for dead posts and firewood, as well as other minor produce granted them free out of the reserves.

The expenditure of Rs 308 makes the cost of boundary work in the Nowgong division Rs. 4-6-4 per mile, as compared with Rs. 17 per mile, which it cost in the previous year.

Sibságar division

59. The total area of the Government reserved forests in the Sibságar division was increased by about 370 acres in consequence of a small rectification of the northern boundary of the Abhaypur reserve, and lessened by a similar change in the eastern boundary of the Desai reserve by about 40 acres; both changes have greatly improved the boundaries in question.

No other changes took place in the area of reserved forests.

60. Two of the proposed reserves, the "Diphu" and "Rengma" forests, have been finally gazetted under Section 19 of the Indian Forest Act, since the close of the year.

61. The area of the protected forests in the Sibságar district remains the same as before.

62. From the total area of the unclassed State forests and waste lands 523 acres have been excluded, partly on account of the alteration of the boundaries of the Abhaypur and Derai reserves, and partly by land given up for permanent cultivation under the Waste Land Rules.

63. The total length of demarcated boundary-lines of reserves in the Sibságar division comes to 139 miles, or 25 miles more than in the previous year, out of which 87 only were cleared and inspected by the Divisional Officer,—Mr. Barker finding himself without funds after a little more than half the work was done.

The newly-added boundary-lines were 10 miles of the proposed Dayang reserve, 5 miles of the Thowrah forest, also to be proposed as a reserve, and 6 miles added in the Desai reserve, according to actual measurement on the ground, as well as 3 miles natural boundary cleared and demarcated in the Dayang and 1½ mile in the Daigurung reserve. The first two named of these forests also accounts for 32 more boundary-marks, besides which, 12 more have been added in the Holongapar upper and lower Daigurung reserves, and six have been done away with in the Derai and Abhaypur reserves.

The demarcated boundaries of the Mikir Hills reserve, measuring 35 miles in length, it has been ordered by the Conservator, shall be kept clear by the two forest guards in charge of it, which they can well afford to do, as there is no other work than patrolling for them to do. They first refused to do so, but have now consented to think about it, and it is not unlikely that they will agree. This accounts for the boundary in question not having been cleared, or reported to have been cleared, before the close of the year.

64. The expenditure on boundary work in the Sibságar division during the year under report was Rs. 612-8, of which, Mr. Barker states, Rs. 183 were paid on account of work done in 1885-86; this makes the cost of boundary work about Rs. 5 per mile.

Lakhimpur division.

65. In the Lakhimpur division the first reserve was gazetted during the year under report; it is the Dehingmukh forest, covering an area of 13,747 acres, or 21 square miles. The Forest Settlement Officer's report was also received on the Jokai forest, which has been declared a reserve since the close of the year.

Press of other works prevented the Deputy-Commissioner from reporting on more than two forests, and a second Forest Settlement Officer was appointed towards the close of the year for the Kuddum and Bhorolwa proposed reserves, in the North Lakhimpur sub-division.

An area of 2,649 acres, or 4·13 square miles, near the Makum coal-fields was proposed as a reserve, and gazetted during the year, under Section 4 of the Indian Forest Act.

66. The area of the protected forests has been decreased by 13,747 acres, or 21 square miles, gazetted as a reserve, and 900 acres given up to the villagers of Monmow for permanent cultivation from the Upper Dehing forests.

67. The area of the unclassed State forests and waste lands decreased by 329 acres given up for permanent cultivation.

68. Boundary work in the Lakhimpur division consists of 131 miles of demarcated boundary line and 1,076 boundary-marks; the former have been shortened by 3 miles in the Upper Dehing protected forest, in consequence of the 900 acres given up for permanent cultivation and several small rectifications of boundaries. One of the boundary-lines cut in this forest defines the land which is to be given up on either side of the railway for permanent cultivation if required, and the timber concession granted to the Assam Railways and Trading Company is also confined to the same area.

Since no land has as yet been applied for, and the timber concession has been but very little worked, it was ordered by the Conservator that these 41 miles of lines should be cleared only every third year, to keep them easily recognisable; this will effect a considerable saving on this work, it being very expensive in the Lakhimpur division.

Excluding these lines, all boundaries but 1 mile and 60 chains were cleared, and the boundary-marks repaired where necessary, and the Divisional Officer inspected all but 3 miles.

The number of boundary-marks has remained the same as in previous years, but they are very numerous; and since the lines are now all well known by the surrounding population, their number can largely be reduced, and much economy be effected thereby without lessening the efficiency of the demarcation.

69. The total expenditure on demarcation work during the year in the Lakhimpur division was Rs. 2,545-11-5, out of which, however, Rs. 1,789-9-5 were paid for work done in the previous season. The balance paid for this season's work, and Rs. 25-2 paid since the close of the year, gives Rs. 781 as the actual cost of boundary work done in the season 1886-87, which is about Rs. 9, as compared with Rs. 32 per mile in the previous year, being a great improvement in the way of economy.

Another improvement effected by Mr. Fordyce is that he has done away with the expensive system of working with imported labour.

Cachar division.

70. The area of the reserved forests in the Cachar division remained unchanged, but about 1,000 acres of *bil* or swamp land within the Dhaleswari reserve, useless for forest purposes, were allotted, for permanent cultivation during the year, by order of the Chief Commissioner. This land was included originally in the reserve, as it was not wanted at that time for cultivation, and to simplify the boundary, so as to prevent a useless and annually recurring expenditure on demarcation.

71. The protected forests have been shown in Statement 49 attached to this report as increased by 308 square miles, which is not an addition really, but merely the correction of an error in the figures shown previously in this statement. No actual change has taken place as regards these forests.

72. The area of the unclassed State forests and waste lands in Cachar was lessened by 1,855 acres, given up during the year for permanent cultivation.

73. The total length of demarcated forest boundaries in the Cachar division is 68 miles, all of which except 2 miles were cleared, and all but three miles inspected by the Divisional Officer. Of the latter, 2 miles are in the North Cachar Hills in charge of the sub-divisional officer.

The total number of boundary-marks is 624, which were repaired where necessary.

The expenditure under "Demarcation" has been Rs. 606-4, out of which Rs. 48-4 were paid on account of the previous season's works, leaving Rs. 558, or Rs. 8-5-3 per mile, which is a reduction in the cost of this work.

Sylhet division.

74. In the Sylhet Division the Langai and Singla protected forests, comprising an area of 170 square miles, was declared a Government reserved forest under the Indian Forest Act. There is very little other Government land stocked with mature trees left in the Sylhet district.

75. The area of protected forests was lessened by the above 170 square miles, but six other forests of an aggregate area of 247 square miles were newly gazetted as protected forests, by which their destruction is guarded against. This must in time become a great boon to the people, already suffering much inconvenience for the want of firewood and other indispensable forest produce for domestic purposes.

76. The unclassed State forests and waste lands in the Sylhet division are estimated to comprise an area of 8,000 acres, all in the South Sylhet sub-division.

The boundaries of the Langai and Singla reserved forests are all natural ones, so no demarcation or other boundary work is carried on in the Sylhet division.

Khási Hills division.

77. There has been no change of area in the Saipung reserve, which is the only one in the Khási Hills. All the other forests in the neighbourhood of Shillong are unclassed State forests, mostly held on long leases only, but they have all been properly demarcated by masonry pillars and are protected like Government reserved forests.

Nága Hills division.

78. No change has taken place in the area reserved for the growth of timber near Kohima in the Nága Hills.

CHAPTER II.—Surveys, Working Plans, and Plans of Operations.

Surveys

79. Forest survey work during 1886-87 was concentrated in the Gáro Hills, and carried out by the Working Plans Division. All other Divisional Officers were informed that any incidental surveys, such as those of boundaries of newly-proposed reserves or rectifications of the boundaries of old reserves, must in future be surveyed by themselves, with the assistance of a ranger or foresters.

Mr. T. J. Campbell was in charge of the Working Plans Division, and directed the survey work, assisted by Mr. C. P. Fisher, a trained forest officer who arrived in December 1886 from home, a forest-ranger of the fourth grade, and eight trained surveyors, three of whom were employed for two-half months, two for five months, two for five and half months, and one for eight months.

80. The forests in which surveys were carried out were the Dambu, Darugiri, Songsak, and Rongrengiri reserves. They commenced work early in November 1886, and closed on the 15th of April 1887, as all coolies refused to stay any longer, and were kept up to this time even with great difficulty.

81. The work done in the Dambu reserve consisted of the surveying of some more interior topographical details, required for conveniently dividing this forest into compartments and a survey of the sample areas selected and demarcated for the purpose of biennial measurements of trees. It necessitated observing 1,302 angles, measurements of 5,877 chains, and took up the time of one surveyor for the whole season. The cost in the aggregate was Rs. 2,057. It cannot be calculated per square mile, as most of the interior details had already been surveyed in the previous year, and this year's work was additional only. If this year's expenditure is added to that of last year's, it makes the cost of the survey of the Dambu Forest Rs. 446 per square mile.

82. The survey of the Darugiri reserve was commenced during the year under report and completed, including all interior topographical details required for a division of the forest into blocks and compartments. It necessitated observing 1,181 angles and the measurement of 8,290 chains. The area of this forest is 2,283 acres, and the cost of the survey came to Rs. 2,321, which is Rs. 650 per square mile.

83. Of the Songsak reserve a traverse survey was made, and some interior topographical details were surveyed also; but most of the latter will yet have to be done. The survey of this forest involved observing 898 angles and measuring of 6,581 chains at a total cost of Rs. 2,261. The total area of this forest being 9,280 acres, it makes the cost of this survey, as far as it has gone, Rs. 156 per square mile.

84. The work done in the Rongrengiri reserve was the same as in the Songsak Forest, and consisted of a traverse survey and some interior topographical detail surveys by prismatic compass, necessitating the observing of 1,181 angles and the measurememt of 8,290 chains. It was completed at a cost of Rs. 2,321, which, as the area surveyed is 8,480 acres, makes the cost per square mile Rs. 175.

All these calculations of cost of survey work include one-eighth of Mr. Campbell's pay for the six months the surveys were being carried out, three-eighths for the same period being charged to valuation surveys, and one-half to the Gáro Hills Division.

Working plans.

85. With a view to preparing a working plan for the Dambu Forest in the Gáro Hills, the latter has been divided into blocks and compartments accurately surveyed. The area statement of these divisions is attached to this report as Appendix III., and a complete map, showing the different divisions and the kind of forest prevailing is now under preparation. A full and detailed description of the condition of the growing stock, the state of regeneration, the nature of the soil, and so forth, of each compartment and sub-compartment was also recorded. In addition to this, the counting of trees in this forest has been carried on during the whole season and completed. At first the counting of all the trees over the whole area was attempted, to have a standard by which future countings might more or less be checked, but it was found that this would take too long, and therefore given up, linear countings, traversing representative areas, being resorted to instead. The result of all these countings was as follows:—

On 243·1 acres all trees were counted.
On 1,955·5 „ 23·5 per cent. were counted.
On 1,757·8 „ 6·6 „ „ „

The number of trees thus counted was 309,268, of which 35,636 were Sal. The figures are shown in detail in Appendix IV. attached to this report.

The concentric rings of 20 trees were also counted, and the result is shown in the tabular statement, Appendix V., attached to this report.

Besides this, the heights of 38 trees and their lengths of bole were measured, and the result is shown in Appendix VI.

Five sample areas were also selected, and the trees standing on them counted and measured for the first time this year; these measurements are to be repeated every second year.

In explanation of the comparatively high expenditure on these works, it must here be stated that in a country like the Gáro Hills, where fever prevails more or less all the year round, and where there is considerable difficulty in getting regular provisions, and where men are separated from their ordinary companions and amusements, higher wages have to be paid and other indulgences shown to induce them to come to and remain at the works, so that a comparison of the expenditure with that incurred on the same amount of work in other parts of the country would not be fair to the officers who conducted this work.

Annual plans of operations.

86. The Divisional Officers submit regularly through their respective Deputy-Commissioners the annual plans of operations. On these the Conservator, after criticism and adjustment of works according to funds available, issues his orders, which insures a proper and systematic procedure in conducting the different works.

CHAPTER III.—Protection and Improvement.

87. In this, as in all other branches of forest management, the strictest economy has been observed during the year on account of the decrease in receipts.

Establishments.

88. The permanent protective establishments have remained unchanged, and in the temporary establishments reductions have been made wherever this was practicable without risking the efficiency of protection and stopping improvements altogether.

89. The changes made in the executive and protective forest charges in the Province have been very few and unimportant, the old arrangement having proved a success in every way.

90. So has the organization of the Nowgong and Sylhet forests into separate divisions, in both of them protection and revenue control are much improved, and the increase in revenue during the last two years in the Sylhet division alone has more than twice covered the two Divisional Officers' pay, and that of the additional protective establishments appointed under them.

General protection against breaches of Forest Law.

91. The tabular statement, No. 50, attached to this report, shows the prosecutions for breaches of forest rules in the different divisions during the year. The number of new cases has increased to 113, as compared with 51 in the previous year; but they were nearly all petty cases, and if it is considered that these offences have been committed over a total area of 10,061 square miles, it is quite insignificant. The increase has chiefly occurred in the Lakhimpur, Cachar, Sylhet, and Khási Hills divisions.

92. In the Lakhimpur division the great temptation to defraud Government by smuggling timber from Government forests to the Brahmaputra and declaring it as having been procured from beyond the Inner Line continues, and is the cause of the proportionately large number of offences; and in the other two divisions, in the Surma Valley, there is a large trade in forest produce carried on, which always will be attended with some crime.

93. The small number of breaches of forest rules in the other divisions must no doubt be attributed to the extremely liberal manner in which forest produce is granted free in this Province from unclassed State forests and waste lands, which prevents people from being tempted to break the law to the same extent as in other provinces.

94. The proportion of conviction to total number of cases decided by the courts is 82 per cent.

95. There were four prosecutions for setting fire to forests, but, in addition to this two cases of the same nature were compounded under Section 67 of the Forest Act.

96. The luxuriant growth of grass everywhere in Assam, making the whole country one vast grazing ground, accounts for there being no prosecutions for unauthorized grazing.

97. The number of forest cases compounded under Section 67 of the Forest Act in the different divisions, the number of persons concerned, and the amount for which they compounded the offences were as follows:—

Name of district.	Number of cases.	Number of persons.	Amount. Rs.	As.
Gáro Hills	3	3	23	0
Goálpára	3	16	122	0
Kámrúp	19	50	314	4
Darrang	1	1	6	0
Nowgong	2	2	56	0
Sibságar	14	20	480	0
Lakhimpur	1	1	330	0
Cachar	1	1	5	0
Sylhet	6	6	37	8
Total	50	100	1,373	12

This is 50 cases and Rs. 1,373-12, as compared with 79 cases compounded in the previous year for Rs. 2,308-5. One of the reasons for this decrease in cases compounded is that two of the Deputy-Commissioners have given it as their opinion that Forest Officers have no power to compound forest offences committed in unclassed State forests and waste lands. This, no doubt, is legally correct; but practically the compounding of offences committed in the latter is even more desirable than of such as are committed in reserves, village or protected forests, and the people, as a rule, very much prefer compounding forest offences to being prosecuted in a court of law.

Forest fires.

98. Fire protection in Assam has again been most successful, as will be seen from the Tabular Statement No. 51, attached to this report. The area attempted to be protected was 28,267 acres more, and that successfully protected was 30,837 acres more, than in the previous year, whilst the total expenditure on this work for the season amounted to only Rs. 739 more than what had been spent in the previous year.

99. The percentage of failures to area attempted, as compared with the previous three years, was as follows:—

	Proportion of failures to area attempted in percentage.			
	1883-84.	1884-85.	1885-86.	1886-87.
Goálpára division	64·32	2·51	·85	2·27
Kámrúp „	11·09	10·09	6·24	·18
Darrang „	·16	1·69	.....	.....
Nowgong „	·35	·17	3·08	·53
Khási and Jaintia Hills Division	·41	·63	.....	3·49

100. This is not so favourable for the Goálpára division as in 1885-86, on account of the burning of 1,033 acres in the Bhumeswar Hill forests out of a total area of 4,033 attempted; but then this is the first year in which the protection of this forest was undertaken, when the danger is always much greater on account of the people living in the neighbourhood not having become accustomed to the extra care which they have to take in dealing with fires on their own fields or grazing grounds.

101. In the Kámrúp and Nowgong divisions the percentage of failures has been less than in the previous year, whilst in the Darrang division there were no failures.

102. In the Khási and Jaintia Hills the percentage of failures was 3·49, whilst in the previous year fire protection had been a complete success. The latter fire occurred in Upper Shillong, and seems to have originated in the carelessness of a picnic party or its servants, but nothing could be proved against them.

103. Taking all the forests, the protection of which was attempted as a whole, the failures come to only 2,071, as compared with 4,641 acres in the previous year, and the officers in charge of these works may well be congratulated on having been so successful, even though the latter part of the season was in their favour.

104. The following statement shows the increase in expenditure, the increase in the area attempted, and that actually protected, in the different divisions:—

	Increase in expenditure, as compared with previous year.	Increase in area attempted to be protected in acres.	Increase in area actually protected in acres.	Decrease in area actually protected in acres.
	Rs.			
Goálpára division	894	22,976	21,728	.....
Kámrup „	.....	459	4,057	.....
Darrang „	.....	.....	.....	.....
Nowgong „	.....	4,832	5,212	.....
Khási and Jaintia Hills Division.	23	.....	.....	160
Total	917	28,267	30,997	160

105. The cost per acre successfully protected in the different divisions, as compared with the three previous years, was as follows:—

	1883-84.		1884-85.		1885-86.		1886-87.	
	As.	P.	As.	P.	As.	P.	As.	P.
Goálpára division	3	6	1	2	1	2	1	0
Kámrup „	0	11	1	3	0	9	0	9
Darrang „	0	3	0	3	0	4	0	3
Nowgong „	2	1	1	9	0	6	0	3
Khási and Jaintia Hills division	6	3	6	7	3	6	3	8

106. With a view of recording more accurately the locality in which fires occur, and the damage done by them, the Conservator has issued instructions that a sketch map, showing the particular locality where a fire occurred, is to be prepared each season, and that the degree of damage done is to be recorded in a tabular statement for each season. The two combined will render it possible to make hereafter a more accurate estimate than can be made now of the injury done to forests by fires.

107. The area of the Government reserved forests in the different forest divisions which, on account of the evergreen trees growing in them, require no special measures of protection against fire, are the following:—

	Square miles.
In the Darrang division	265
„ Sibságar „	551
„ Lakhimpur „	21
„ Cachar „	745
„ Sylhet „	170
„ Khási and Jaiantia Hills Division	50
Total	1,802

Account of fire protection according to divisions.

108. The following is a more detailed account of fire protection work in the different divisions.

Goálpára division.

109. In addition to the Sidli, Guma and Panbari-Pechadaveri reserves protected in the Goálpara division against fire in former years, the Bengtal, Darogaon, and Bhumeswar Hill reserves were also attempted in the year under report. The arrangements for their protection were, however, not the same as in the other forests, where this work is carried out by direct departmental agency; but Mr. Copeland made an arrangement with the villagers living in the neighbourhood that they should have dead Sal-posts for their houses, firewood, and other minor produce from the reserves as long as there was no fire. As an experiment, this attempt of fire protection by Mr. Copeland is very praiseworthy, but it could hardly be expected that it would be altogether successful, during the first year or two at any rate, and if the results of fire protection work in the Goálpára division are judged merely by the areas burned, they appear less favourable than they really are, and the Conservator is therefore in favour of the experiment being continued as such for some years.

110. In the Bengtal-Darogaon reserve 470 acres were burnt; but, as the villagers gave up the culprits who set fire to the forests, the free grant of forest produce is continued to them. In the Bhumeswar Hill, on the other hand, 1.033 acres were burnt, and the villagers could give, or would give, no account of the origin of the fire; so the privilege of free grants of forest produce from the reserve has been withdrawn.

111. There were two fires in the Panbari-Pechadaveri reserves by which 140 acres were burnt. The persons who set fire to the forests were not discovered, but the Divisional Officer is convinced that they were lit by men who brought large herds of buffaloes from Bengal for sale in Assam, and passed through this reserve along village paths, because the regular high road from Haldibari to Kachugaon had not been kept open.

112. In the Sidli reserve two small patches, extending in the aggregate over 45 acres, were burnt. One of these fires, it is suspected, was lit by a dismissed forest guard, and the other was an accident which originated in the carelessness of two fire-guards when reburning one of the fire-lines.

113. The expenditure on fire protection in the Goálpára division has always been high, and in the year under report it increased by Rs. 894, which was not paid on account of the new areas, but was an increase in the expenditure on the forest protected for years past. This is unsatisfactory, but Mr. Copeland has explained that it was due to exceptional causes, and that he has already made arrangements to prevent a recurrence in the coming season.

114. In the Guma reserve, the determined way in which a former forester, dismissed some years ago for misconduct, induced people to burn this forest, made it necessary to increase the number of guards considerably this year, which accounts for the extra expenditure in this forest.

The work done in the way of clearing fire-lines was done by contract, and actually more so this year than before, and it cost Rs. 218 less than in the previous year. The cost per square mile protected in the Guma reserve came to about Rs. 87, as compared with Rs. 74 in the previous season.

115. The reason for the increased expenditure in the Sidli forest was the re-opening of timber works all through the district, which took away the villagers from the neighbourhood of this forest, and an inferior class of men from a different part of the district had to be employed. The number of patrolling stations was also increased from 11 to 14 this season. The cost per square mile protected in the Sidli reserve come to about Rs. 37, as compared with Rs. 40 in the previous season.

116. The cost per square mile protected against fire in the Panbari-Pechadaveri reserve was Rs. 27, as compared with Rs. 24 in 1885-86.

117. The following table shows the expenditure in the different reserves on fire protection in detail:—

Name of reserve.	1885-86.				1886-87.			Total cost.
	Area in acres.	Cost of establishment.	Cost of fire-line and huts.	Total cost.	Area in acres.	Cost of establishment.	Cost of fire-line and huts.	
		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
Sidli	43,757	602	1,377	1,979	43,757	639	1,936	2,575
Guma	15,776	381	1,486	1,867	15,776	886	1,268	2,154
Panbari Pechadaveri ...	3,290	.....	121	121	3,290	.....	133	133
Bengtal-Darogaon	.....	.....	.....	.....	7,470	.....	.....	...
Bhumeswar Hills.....	.....	.. ...	.....	.....	4,033	.....	.....	...
Total.....	62,823	983	2,984	3,967	74,326	1,525	3,337	4,862

Kámrúp division.

118. The area over which fire protection has been attempted during the year under report in the Kámrúp division was 59,909 acres more than in the previous year; but in the Jari Khuri, Bura Gohain, and Moga Khal protected forests fire protection had to be given up entirely, because, under the rules at present in force for these forests, it would have required a higher expenditure than the circumstances of the case justify.

119. For the same reason the efforts made to protect the small isolated Hajo reserve have proved useless. It was set on fire again by some malicious person, who has not been discovered, at the most dangerous time of the season, and its protection will not be attempted next year.

With the exception of this Hajo reserve and a small area of 12 acres in the Kulsi plantation, fire protection has been entirely successful. The latter fire was the result of an accident when grass lands were being burnt off, which was done not sufficiently carefully by the forester in charge. He was transferred by the Divisional Officer to the most out-of-the-way part in the division as a punishment.

120. Besides the areas referred to above, the following have not been burnt; they are not shown in Statement No. 51, because the measures taken for their protection were not sufficiently complete to have justified this:—

Gizang reserve.....	930	acres.
Jaipur „	774	„
Bara Dobha „	1,170	„
Nampathar „	320	„
Barjuli „	1,120	„
Moga Khal „	180	„
Total	4,494	„

The leasing out of grass lands near the forest protected against fire for cultivation has been continued, and proved of great use as an extra safeguard against the spread of fires which occurred outside the reserves.

121. The total expenditure in the Kámrúp division on the protection against fire of the areas shown in Statement No. 51 during the season has been Rs. 2,798, which is about Rs. 30 per square mile, as compared with Rs. 32 expended in the previous year.

Darrang division.

122. The area protected against fire in the Darrang division in the year under report was the same as in the previous year, and it was entirely successful.

123. There has been a slight decrease in expenditure, Rs. 376 having been spent, as compared with Rs. 428 in the previous year, or Rs. 12 per square mile. The proportion of this paid for establishment and that paid for clearing fire-lines was as follows :—

Cost of fire-conservancy establishment	Rs.	138
„ clearing fire-lines	„	238
Total	„	376

124. In the Nowgong division the protection against fire of 4,832 acres more than in the previous season was attempted, and with less failures, the latter amounting to 111 acres only, as compared with 491 last year.

Nowgong division.

The protective measures adopted regarding the old areas were much the same as last year. 27 miles of external fire-lines 300 feet in width, 5¼ miles of block lines 200 feet in width, and 2½ miles of road with a hundred feet on either side, were cleared.

In the addition to the Diju and the Kholahat reserves, the protection of which against fire was attempted for the first time this year, external lines, 20 feet only in width, were cleared, and the vegetation burnt outside the forest for some distance, which has cost much less and been quite successful.

125. The fire in the Suang reserve was lit by four men, who went into the reserve to fish. They were caught and are being prosecuted. The Kholahat reserve was fired by two men, who were also caught, but each accuses the other of having done it, and the case is still under investigation.

126. The total expenditure on this work during the season has been Rs. 422, or about Rs. 13 per square mile, as compared with Rs. 21 paid in the previous season, which is a great improvement.

The proportion in which this amount has been paid for establishments and for clearing of fire-lines was as follows:—

Cost of fire-conservancy establishment	Rs.	199
„ clearing fire-lines	„	223
Total	„	422

127. The area protected in the Khási Hills against fire remains the same as in previous years. It includes all the forests belonging to Government which require such protection. They are in the neighbourhood of Shillong. Free labour was used this season, instead of prison labour used in former years, and the total expenditure came to Rs. 1,028, as compared with Rs. 1,005 in the previous season. Of this, Rs. 771 were spent on the Shillong forests, which is Rs. 27 less than last year, whilst the expenditure in the Riatkhwan forest came to Rs. 257, which is Rs. 50 more than last year. Out of the total expenditure of Rs. 1,028, the fire-conservancy establishment cost Rs. 707 and the clearing of fire-lines Rs. 321.

Khási and Jaintia Hills division

128. As reported in former years, the natural reproduction in the forests of Assam is everywhere excellent, and has been particularly so in the Sâl forests this year. In the mixed forests the regeneration of the better trees might be much facilitated by the removal of inferior kinds, but the utmost circumscription of expenditure, which had to be enforced on account of the temporary falling off in receipts during the last three years, necessitates improvements of this kind being deferred so as not to cut short the funds needed for protection and the rigid maintenance of an efficient revenue control.

Natural reproduction.

129. The necessity for reducing expenditure has prevented any extensions of old plantations or starting of new ones during the year under report; but every care has been taken of the areas planted in former years, the growth of the trees in all of which is, without exception, excellent and very healthy. The only drawback is that labour is so very expensive in this Province.

Artificial reproduction

130. The two acres of Teak plantation in the Lakhimpur division have been struck off in statement No. 52, since, as frequently reported, this area is but very irregularly stocked, many trees having been very much damaged by borers, and because no expenditure is being incurred any longer on its up-keep.

131. The total expenditure during the year on plantation work, as shown in Statement No. 52, has been Rs. 5,388, of which Rs. 14 were spent in the Gáro Hills on cinchona plants, which are planted in the forest bungalow garden. No extra expenditure will, therefore, be incurred in future on those plants.

Account of plantation work according to divisions.

132. The following is a brief account of the plantation work done in the different divisions.

133. There were no extension of plantations made in the Kámrúp division, and the expenditure on existing ones was restricted to less than half, as a reference to the Tabular Statement No. 52, attached to this report, will show, nevertheless, the general condition of the trees all through the different plantations is most satisfactory, and their growth during the year has been all that could be desired.

Kámrúp division.

In older Rubber plantations the trees are already closing overhead and killing the undergrowth, but the Rubber plantations made in latter years still require occasional clearing of the lines.

134. In all the Teak plantations, including even that latest made (1881), no further clearing is required.

A storm up-rooted a number of the young Teak poles, 8 of which were sold for Rs. 6, the first income from these plantations, and the remainder were used by the department, but no permanent damage was done, as the extra amount of air and light has had the natural effect on the remaining trees, to make them grow faster than before.

135. The growth of the Sisu and Ajhar-trees is somewhat slow on account of the very heavy undergrowth of grass they have to combat with.

136. The Ceara Rubber-trees have been reported by Mr. Mein as a failure, and the Conservator quite agrees with him. Their growth is extremely fast the first few years, after which their crowns get either completely broken down by wind, if in the least exposed, and where this is not the case, decay sets in at a very early age, which proves that the climate of Assam is not suited for this tree. There are still a few left at the Kulsi plantation, the growth of which will be carefully watched.

The growth of the two Maipak-trees (*Evodia meliæfolia*) has been very vigorous. The tree is indigenous in Assam, and no doubt exists as to whether it will grow or not. The main object in having planted it in the different divisions is to make experiments with well and rapidly-grown trees to see whether they will be suited for splitting into shingles, and how durable the wood will be as such.

The Cinchona plants (*Cinchona succirubra*) have not done well during the year, and only 130 are alive out of the 298 mentioned in last year's report.

The growth of the *Pithecolobium*-trees and the paper Mulberry (*Broussonetia papyrifera*) continues to be very satisfactory, whilst that of the Phillipine plantain is the reverse, as has been reported for some years past, no doubt owing to the cool climate of Assam.

Some new Rubber-yielding plants, six of *Castilloa eclastica* and 14 of a species of *Landolphia*, were received from Dr. King, the Superintendent of the Calcutta Botanical Gardens; two of the former have died, but the remainder and the Landolphias are thriving at present.

137. The total expenditure on plantation work in the Kámrúp division has been as follows:—

	Rs.
Rubber plantations	305
Timber ditto	207
Experimental planting	45
Nurseries	55
Establishments...	208
Total...	820

138. Full details regarding all plantations in the Kámrúp division, such as the measurements of trees, the expenditure incurred on the different works, and the rainfall, will be found in the plantation memorandum drawn up by Mr. Mein, the Divisional Officer (Appendix VII. of this report).

Darrang division.

139. Plantation work in the Darrang division consists exclusively of the Charduar Rubber plantation, and another small plot near Tezpur. The two comprise an area of 1,051 acres, and the growth of the Rubber-trees is most luxuriant. Want of funds has, as already stated above, prevented any extension being made this year. A few lines were cleared for future extensions, which was all that could be attempted.

140. The clearing of the lines of undergrowth and of the branches of the trees closing in from above is the most important work in the plantation, and was properly attended to during the year.

141. Wild elephants do occasionally some damage to the trees, but it has not been any worse than in previous years. The regular watchmen are still kept up both day and night to prevent these animals doing serious damage.

142. Large numbers of the young trees in the oldest nursery were cut out because it was found they had not room enough to grow, and were becoming sickly, affording convenient shelter to insects for breeding; but there are still far more young trees remaining in the nurseries than will be required for extensions of this plantation during the next ten years.

143. The Rubber plants placed in the forks of trees have not done any better than in former years. The difficulty of keeping their roots sufficiently moist in the dry weather is no doubt the cause of this; 41 fresh plants were put out in place of such as had died during the year.

144. The better kinds of timber-trees interplanted with the Rubber-trees have been kept clear from jungle, and are much improved. A sum of Rs. 209-13 was spent on this work.

145. The total expenditure on the Charduár Rubber plantation has been Rs. 3,989 during the year, as compared with Rs. 4,004 spent in 1885-86.

The small experimental Rubber plantation at Bamoni Hill near Tezpur requires but little expenditure now, since the trees have grown large enough to keep the undergrowth down. Rs. 10 were spent on cutting down scrub and grass and Rs. 14 on clearing a fire-line.

146. The usual plantation memorandum, drawn up by the Divisional Officer, Mr. Jellicoe, showing in full detail the measurements of trees, the expenditure incurred, and the rainfall during the year, is attached to this report as Appendix VIII.

147. In paragraph 11 of the Government of India review of last year's Forest Report it was ordered that a detailed statement of the whole cost of each Rubber plantation, including cost of special fire protection, &c., be submitted. This has been prepared, and is attached to this report as Appendix IX.

148. When considering the whole cost of each Rubber plantation, it must, however, be borne in mind that during the first three years, if not for longer, this plantation work was almost entirely experimental, and the cost during that time has been left out of the calculation of future maintenance of the plantation. We knew next to nothing when we began, and had everything to learn by degrees, for which allowance must be made.

149. It was also ordered that an estimate be framed regarding the probable cost of maintenance of these plantations, their exploitation, and income.

The records available, which were prepared with great care and in full detail from the beginning are sufficient to form an approximately accurate forecast of the cost of maintenance, which, as matter of course, will decrease steadily as the Rubber-trees grow older and sufficiently large to keep down the undergrowth. It is estimated to be as follows:—

	Rs.
Plantations from 1 to 5 years old	10 per acre per annum.
" " 5 to 10 "	5 " "
" " 10 to 15 "	3 " "
" " 15 to 20 "	2 " "
" " 20 to 25 "	1 " "

After the age of 25 years no expenditure will be necessary, if the trees have been well taken care of, and made the same vigorous growth as they have done hitherto.

On the basis of the above estimate, the Rubber plantations existing now would require the following expenditure in the future:—

	Rs.
From 1887-88 to 1891-92	18,290
" 1892-93 to 1896-97	10,860
" 1897-98 to 1902-03	4,865
" 1903-04 to 1907-08	1,435

150. The cost of exploitation would, according to the rates paid for the last four years' experimental tapping, be Rs. 38 per maund, which is more than sufficient when it is borne in mind that the tapping of the trees in the plantations will be much easier than that of the trees which were tapped experimentally during the last four years, these latter standing singly over a large tract of country.

151. As regards an estimate of the probable income from these plantations, this cannot be made now. Such an estimate would be pure conjecture, as there are positively no data whatsoever to go upon for forming such an estimate. The result of the last four years' tapping can, under no circumstances, be applied to the trees which now grow in the plantations. The former are trees probably from one to two hundred years old which have been tapped more or less for the last 30 or 40 years, whilst the trees in the plantations, it is estimated, could be tapped first at an age of 25; but this in the first few years would have to be done most cautiously; some of the trees would be tapped more severely than others, with a view to gradually killing them to make room for their neighbours. The yield from a young tree and that from an old one, such as were tapped, must differ widely, nor are there any data whatsoever available, to judge by what a young tree will yield as compared with an old one; it would be nothing but speculation, and an estimate formed under such conditions could only be misleading and have no value.

152. Besides this, there is a great deal to be learnt yet in other respects even, about the yield of old Rubber-trees, four years' tapping is not sufficient to base an estimate on. The Conservator feels sure that much remains to be found out about the yield of Rubber in different seasons and in different periods. The trees tapped experimentally for the last four years have only yielded about half this year of what they did last, and the Rubber exported from Assam has also been only about half, which seems to indicate that either the season was an unfavourable one, or that the Rubber-trees, as a natural consequence of several years' tapping, will give so little that it is not worth while continuing it until the trees have recovered their former vigour. The latter is most likely to be the case, and, if it proves to be correct, will be a great safeguard against the destruction of the trees. It would also explain the fact of the Rubber-trees having yielded all through the Province for the last 19 years, to the Conservator's personal knowledge, whilst he was positively assured 19 years ago by the people who had been engaged in this trade, and ought to have known correctly, that the Rubber-trees were all dying and would not yield another maund, no matter what measures were adopted to get it out of the trees.

The latter fact, and the precaution used to make the plantations in localities where naturally-grown Rubber-trees were most plentiful, and the steady rise in the price of Rubber afford guarantees that the plantations will well repay the expenditure incurred.

Sibságar division.

153. The planting of superior timber-trees in the Nambor forest was not extended for the want of funds, but the old areas planted were properly looked after. The growth of the trees continues to be very good. 106 acres had the undergrowth cut, and 74 acres of the later plantings were gone over and had vacancies filled up, where necessary, with strong, healthy Ajhar-plants.

The average expenditure on clearing of undergrowth was Rs. 4 and on the filling up of vacancies Rs. 5 per acre.

A number of young, strong, and healthy Ajhar-trees was planted out in the forest without any previous clearing as an experiment, which has succeeded well, the young plants looking very healthy, only requiring now more light and air to grow up vigorously.

The total expenditure on planting in the Sibságar division during the year came to Rs. 423-8-6.

Khási and Jaintia Hills division.

154. No regular plantations are attempted in the Khási Hills division, but the existing blanks in the forests near Shillong, protected against fire, are gradually being filled up by the sowing and planting of the most useful indigenous trees, such as Pine and Oaks. The expenditure on this work during the year has been Rs. 131.

Sowing and planting on *jhumed* lands.

155. Efforts have again been made to induce some of the *jhúming* people in the Province to grow trees on *jhúms* if allowed to enter the reserves for this purpose, but everywhere have the people refused to subject themselves to any interference in their cultivation. They say that they fear the displeasure of the Forest Officer in case of failure of raising the trees, and all persuasion has failed hitherto to give them confidence. The true reason, however, is that there is a superabundance of rich land to which they can go and *jhúm* without coming into a forest reserve, which makes them independent. Under such circumstances, their demands would be so high that this department could improve different tracts in reserves, where such is desirable, at but slightly higher cost and with better results than could be hoped for from the independent villagers, to judge by the result of this year's experiment of planting out young trees in the forest without previous clearing, as was done in the Sibságar division.

The small attempts at the planting of *jhúms* made in the Kámrúp and Nowgong divisions have met with very little success, and the officer in charge of the Lakhimpur division has reported that it seems hopeless to get the people of that district to plant or sow timber-trees on *jhúms*, as they are very independent.

The Conservator has hitherto made it the condition that only such lands in reserves as had some time or another been *jhúmed* before should again be allowed for *jhúming*, which, however, has not been made one of the reasons for objecting, because there is in many instances a disinclination showing itself now amongst these people to do hard work, such as the cutting down of old forests.

Cutting of climbers.

156. The cutting of climbers in a systematic manner was confined to the Kámrúp and Nowgong divisions, but some of this work was also done in the Dambu reserve in connection with the valuation surveys made there. The cutting of climbers is not attempted in any other than Sâl forests.

157. In the Kámrúp division, 2,856 acres were gone over in the Barduár, Kulsi, and Milmillia reserves, where all the climbers were cut at a cost of Rs. 55; and another area of 320 acres in the Barduár and 1,750 acres in the Milmillia reserve were gone over, and had the climbers cut by villagers in return for dead posts and other building material granted them from these reserves free of payment.

In the Rani and Kowasing reserves 1,624 acres were cleared of climbers at a cost of Rs. 113.

158. In the Nowgong division, 1,600 acres were cleared of climbers in the Bamuni and Suang reserves at a cost of Rs. 22.

Communications and buildings.

159. The necessity for reducing expenditure wherever practicable has naturally also restricted road work to some extent. The most of this was, as for some years past, done in the Gáro Hills division to make the valuable Dambu Sâl forest accessible, previous to this road being made over to the Department Public Works.

160. The expenditure on road work in this department during the year under report has been Rs. 3,501, as compared with Rs. 18,837 in the previous year.

161. With the exception of a temporary office in Sylhet, no new buildings were constructed, except small inspection huts, and such as were required for forest subordinates and workmen in or near the forests.

162. The total expenditure on buildings during the year was Rs. 8,076, as compared with Rs. 9,053 spent in the previous year.

Account of road work and buildings according to divisions.

163. The following is an account of road work and buildings according to divisions. Road work was done in 7 out of 10 divisions, whilst building work had to be done in all.

164. The chief road work done in the Gáro Hills division consisted in repairs to the Damra-Dambu road before it was made over to the Public Works Department; its cost came to Rs. 1,287. Besides this, a cart-track and foot-path were made in the Dambu forests for the conveyance of timber to the road at a cost of Rs. 25, and a road up to the forest bungalow in Tura at a cost of Rs. 24.

165. The building work in the Gáro Hills division consisted of repairs to the Tura bungalow and out-houses, the commencement of a small inspection hut and out-houses at Bagmara, the completion of the inspection huts and erection of huts for the subordinates at Damra, the construction of a godown at Chima, and a few other small huts, the total cost of which in the aggregate came to Rs. 1,180 during the year.

Goálpára division.

166. No road work was done in the Goálpára division, neither is it required, as all the forests are easily accessible by district roads and village paths.

With the exception of a small inspection hut at Patgaon, no new buildings were constructed, but all the money available was used for repairs.

The total expenditure came to Rs. 647, as compared with Rs. 559 spent in the previous year.

Kámrúp division.

167. In the Kámrúp division there are the following four main roads which were kept in repair by the Forest Department during the year, at a cost of Rs. 918, as shown below:—

	Rs.
(1) The Hathigarh-Balikusi road	692
(2) The Kulsi-Rajapara road	65
(3) The Bokulipara road	59
(4) The Umsum road	102
Total	918

Besides this, Rs. 61-12 were spent on inspection paths and other minor works, which, together with Rs. 56 paid for bolts and nails for bridges, brings up the total expenditure on road work in the Kámrúp division to Rs. 1,036.

168. The chief work done in the way of building in the Kámrúp division was the repairing of the forest bungalow and out-houses in Gauháti, at a cost of Rs. 1,468, and, besides this, Rs. 191 were spent on fencing the compound.

At the Kulsi plantation Rs. 15 were paid for repairs to the bungalow and Rs. 527 expended on repairs of coolie huts and other buildings.

At Ukiam, one of the patrolling posts, the inspection hut was repaired at a cost of Rs. 77, and at Rajapara, another patrolling post, the inspection hut was repaired at a cost of Rs. 60, whilst the huts for subordinates at Jongakhuli, the head-quarters of the Singra range, were repaired for Rs. 18.

At Rani, the head-quarters of the Rani range, an office and a substantial inspection hut were erected at a cost of Rs. 132, and Rs. 60 were paid for out-houses. Repairs to the buildings at the head-quarters of the Jirang range came to Rs. 50, which, together with a miscellaneous expenditure of Rs. 12, brings up the total cost of building work in the Kámrúp division to Rs. 2,610.

Darrang division.

169. The road work in the Darrang division consisted of the usual repairs to existing roads, and the Balukpung road leading to the foot of the Aka Hills, required, as heretofore, the largest amount of work; its cost, although repaired with impressed labour, came to Rs. 224 during the year.

Of the other roads which were repaired, the Dhekrigaon, South Charduar and Phatasali roads were the most important.

The total expenditure on road work in the Darrang division came to Rs. 476 during the year.

The amount of Rs. 296 spent on buildings was also entirely used for repairs at Tezpur, Bhairabighat, Dhekrigaon, and Behali.

Nowgong division.

170. No road work was done in the Nowgong division, neither is it required, since the district roads and village paths are sufficient for the present, and on the repairs of the existing buildings Rs. 190 only were spent.

Sibságar division.

171. Of the forest roads in the Sibságar division about 50 miles were cleared and repaired at a total cost of Rs. 201. The further construction of the bridle-path in the Mikir Hills could not be attempted for want of funds, but the reserve in these hills is sufficiently accessible by village paths, although the latter make unnecessary detours. As soon as an increase in receipts justifies a higher expenditure, the opening out of this new bridle-path will be continued.

172. The inspection huts, as well as the huts for subordinates at Daigurung, Ohgori, and Kasomari, were repaired during the year, and more will be done as soon as funds become available. The expenditure on building work in the Sibságar division came to Rs. 555. The Divisional Officer's bungalow at Sibságar and his office were in charge of the Department Public Works.

Lakhimpur division.

173. But very little road work is done in the Lakhimpur division by the Forest Department, not that the existing roads and paths about the forests could be worse than they are, but to repair them would require an enormous expenditure, which this department cannot provide for, besides which, they are all district roads, and not specially required for forest purposes only.

The Rs. 33 spent on road work during the year were paid for clearing short distances connecting the reserves with district roads.

174. The inspection huts and those constructed for the use of forest subordinates in the Lakhimpur division, are distributed over nine different stations, three of which are the head-quarters of ranges and the remainder patrolling posts, and most of them were repaired where necessary. The Divisional Officer's bungalow at Dibrugarh was in charge of the Department Public Works. The total expenditure during the year under report on building work came to Rs. 374.

Cachar division.

175. Road work in the Cachar division was chiefly carried on in the Katakhal Reserve, where Rs. 360 were spent. The other paths repaired are of comparatively short lengths, with the exception of the roads in the Upper Jiri and Dhaleswari reserves, which are paths connecting the forests or the patrolling posts and inspection huts with district roads. The total expenditure on road work in the Cachar division came to Rs. 405 during the year.

176. All forest buildings in the Cachar division at Silchar were repaired, the expenditure on which had to be heavy during the year, as not much was done the year before on account of retrenchments; the total amount paid in the year came to Rs. 1,788.

Sylhet division.

177. No road work was done in the Sylhet division, nor is it required, since all forests are sufficiently accessible either by district roads or rivers. The small amount of Rs. 15, which appears in the summary of expenditure, was spent on a path leading to the forest office in the station of Sylhet.

178. A temporary office building was erected at Sylhet, the head-quarters of the Divisional Officer, as there is no room in the Deputy-Commissioner's cutcherry for the forest office at present. This cost Rs. 347, and the remainder of the year's expenditure, Rs. 22, was paid for the construction of several small huts for subordinates.

179. No road work was done in the Khási Hills, and the small amount of Rs. 66 appearing in the summary of expenditure under the head of Buildings was paid for repairs of huts occupied by the subordinates of the department.

Khási and Jaintia Hills division

CHAPTER IV.—YIELD AND WORKING.

180. The fact of having had to take over the felled timber in the Dambu forest in the Gáro Hills from the contractors who failed, and the necessity of showing to the native timber-cutters and traders that the Dambu forest can be worked to advantage, made timber operations by direct departmental agency in the Gáro Hills division necessary. 218 trees were accordingly logged, or cut into beams and sleepers.

Departmental operations.

None of the timber which was converted had reached the sale-depôt at the close of the year on account of the unusual difficulties which arose, when first starting these works, in getting carts at reasonable rates, because in this country the demand for them far exceeds the supply, whilst the cart-hire cannot be raised to ensure the works becoming remunerative. Great difficulties were also experienced in the beginning in getting sawyers to work in the Gáro Hills, which drawbacks it will take some time and skilful management to overcome.

The timber in forest depôts at the close of the year, amounting to 21,626 cubic feet, was the following:—

			Number.	Cubic feet.
Sal logs	...	...	857	11,085
„ beams	...	...	119	805
„ sleepers	...	...	7,398	9,732
„ planks	...	...	12	4
Total	...	...	8,369	21,626

All the remaining timber and other forest produce shown in Statement No. 56, attached to this report, were either worked out for use by the department, or consisted of drift and confiscated wood.

The Rubber bought by this department in the Gáro Hills is also entered in the above statement.

181. The experimental tapping of the selected Rubber-trees (*Ficus elastica*) in the Koliajuli and Sonai Hills of the Balipara reserve in the Darrang district was continued under the personal supervision of Mr. J. T. Jellicoe, until he met with an accident, when this work had to be completed under the supervision of the forest-ranger, Babu Dina Nath Kar. The results are shown in Appendix X. of this report.

Experimental tapping of Rubber-trees.

182. Two fresh casualties occurred during the year, and the number remaining out of the original 50 trees is now 46. In addition to these, two out of the six (No. 51 to 56) tapped for the first time in 1884-85, were tapped this year, after one year's rest. These two trees were Nos. 55 and 56.

The total yield of dried Rubber obtained by this experimental tapping was only 1 maund 4 seers and 8 chatáks, as compared with 4 maunds 4 seers and 10 chatáks obtained in the previous year.

The average yield per tree in Rubber and in money, as compared with former years was as follows:—

	1882-83. Average yield per tree in Rubber.			1883-84. Average yield per tree in Rubber.			1884-85. Average yield per tree in Rubber.			1885-86. Average yield per tree in Rubber.			1886-87. Average yield per tree in Rubber.		
	S. C.	Rs. A. P.		S. C.	Rs. A. P.		S. C.	Rs. A. P.		S. C.	Rs. A. P.		S. C.	Rs. A. P.	
Trees Nos. 1 to 50	4 4	8 10	10	1 1	0 13	9	2 5	3 9	0	3 4	6 11	8	1 0	2 8	4
„ 51 „ 56	.....	.....		.....	.....		12 10	17 10	5	.....	.....		.....	.....	
„ 51 and 52	.....	.....		.....	.....		.....	.....		5 13	12 0	6	.....	.....	
„ 55 „ 56	.....	.....		.....	.....		.....	.....		.....	.....		3 3	8 0	7

183. The above figures show that the average quantity of Rubber yielded by one tree has been less than in any previous year, it being one chaták less than in 1883-84. The value in money, as shown above, depends of course on the market, and on this account is higher than it was in 1883-84.

184. A close examination and comparison of the detailed statement (Appendix X.) with those of former years shows that the fluctuations in the yield of one and the same tree

in different years is often very considerable, and remains up to the present inexplicable, since the officers, under whose personal supervision these experiments were made, have up to date not been able to find out any reasons for, or causes of, these very material fluctuations. It is quite evident that we have as yet much to discover to be able to make an even approximately correct estimate of the yield of Rubber-trees.

185. As pointed out by Mr. Jellicoe, the difference in yield has been sometimes very remarkable, as, for instance, tree No. 50 gave in 1884-85 4 seers, in 1885-86 5 seers 4 chatáks, when suddenly in 1886-87 its yield came down to 6 chhatáks only, and there are other trees, as, for example, Nos. 12, 17, 18, 20, 21, 42, and 49, that show equally remarkable differences in yield between last year and this, which Mr. Jellicoe has not been able to account for in any way.

The Conservator feels sure these are not ordinary fluctuations in the yield of Rubber-trees, and that a much closer watching of this tapping will be necessary in future.

The slight but general falling off in the yield of these trees is probably natural, and the figures seem to show that this difference is not due so much to the differences in the seasons as to that in the individual trees. The falling off in the average yield per tree of the six, Nos. 51—56, has even been more marked than of the other 50 trees.

186. The total cost of the tapping in the year under report has been Rs. 106-8, as compared with Rs. 161-4 in the previous year, or, if calculated according to the Rubber obtained, it came to Rs. 96 per maund, as compared with Rs. 39 paid last year.

In addition to the cost of tapping, there was an expenditure of Rs. 6-5-6 on account of freight, brokerage, &c., &c., and Rs. 5-14-6 agency commission for selling the Rubber.

187. The gross receipts obtained by this experimental tapping were Rs. 117-15, and the net result was a loss of 13 annas, as compared with Rs. 157-10 and Rs. 3-10 profit respectively in the previous year.

Removal of produce by consumers and purchasers.

188. Nearly all the yield of the Assam forests continues to be removed by consumers or purchasers as heretofore. The tabular statements, Nos. 54 and 55, attached to this report, show the total outturn of timber, firewood, and other minor forest produce removed during the year.

An abstract has been given at foot of these statements, as desired in the Government of India review of last year's report.

Changes in forest rules.

189. The changes in the forest rules, which were authorised by the Chief Commissioner during the year, are the following:—

The working out of firewood on time permits was extended to Sylhet and Cachar. The Makai-tree (*Shorea Assamica*) was added to the list of reserved trees.

The collection of royalty according to cubic contents was authorised for the Assam Valley districts and the rates fixed.

The fee payable on a home consumption permit in Sylhet and Cachar was increased from 8 annas to Re. 1.

Dhubri and Fakirganj, in the Goálpára district, were gazetted as places where timber and other forest produce shall be stopped for examination and the payment of any revenue which may be due.

The collecting of royalty on Thatching-grass and Reeds exported by the Brahmaputra from the valley districts has been authorised.

The control over forest produce in transit has, under the Sylhet River Rules, been extended to the Barák, Gopla, Kwahi, Karangiya, Manu, and Dhalai rivers in the district of Sylhet.

The following places have been gazetted as forest revenue stations under the Sylhet River Rules:—

1. Silua on the Juri river.
2. Maulvi Bázár on the Manu river.
3. Muchikandi on the Kwahi river.

Working of the permit system.

190. With the exception of the above alterations, the permit system of working the forests remains the same as in the previous year. The number of each kind of permit and the fees realised on them, as compared with the previous year, are shown in Appendix XI.

191. All produce removed free of royalty on home-consumption permits has been entered in the column of free grants in the Tabular Statements Nos. 54 and 55, and an abstract of free grants showing such as were made to right-holders, such as were granted under concessions by the Local Government, and such as were granted under executive orders separately, has been attached to this report also as Appendix XII.

Account of timber and other forest produce removed

192. The usual statements showing the total outturn of the forests in Assam, as compared with that of the previous year, have been prepared in accordance with the orders of the Chief Commissioner. They are attached to this report as Appendices Nos. XIII. and XIV.

193. The yield of timber and other wood in the valley districts, the Gáro, Khási, and Nága Hills is shown in cubic feet in the following abstract, as compared with the yield of the previous year:—

	1885-86.				1886-87.			
	Sâl.	First class	Second class.	Total.	Sal.	First class.	Second class.	Total.
From reserved forests...	63,855	13,707	26,386	103,946	145,623	22,386	21,125	189,134
„ protected and unclassed State forests.	35,467	173,353	413,792	622,612	42,738	165,118	346,218	554,074
To al.....	99,322	187,060	440,178	726,560	188,361	187,504	367,343	743,208

194. The estimated solid cubic contents of boats, poles, and dead wood yielded by the forests in the valley districts, the Gáro, Khási, and Nága Hills was the following, as compared with the previous year:—

	1885-86.				1886-87.			
	Poles.	Boats	Dead wood.	Total.	Poles.	Boats.	Dead wood.	Total.
From reserved forests...	21,598	360	75,875	97,833	6,879	.....	165,208	172,087
„ protected and unclassed State forests.	27,270	33,540	29,236	90,046	9,213	74,349	62,382	145,944
Total.....	48,868	33,900	105,111	187,879	16,092	74,349	227,590	318,031

195. The following abstract shows the logs, posts, planks, and firewood yielded by the Government forests in Cachar and Sylhet, and such as were removed from private or imported from foreign forests, as compared with the previous year:—

	1885-86.				1886-87			
	Logs.	Posts and planks.	Fire-wood	Total.	Logs.	Posts and planks.	Fire-wood.	Total.
From Government forests.	267,766	5,401	75,297	348,464	417,818	7,164	30,364	455,346
From foreign forests ...	54,417	96	6,872	61,385	56,205	527	1,632	58,364
„ private „ ...	207,680	2,201	77,135	287,016	199,907	3,523	38,029	241,459
Total.....	529,863	7,698	159,304	696,865	673,930	11,214	70,025	755,169

196. From the first of the above statements it will be seen that, although the total quantity of timber of all kinds removed from the Government forests has increased by 16,648 cubic feet, the yield of Sâl, which is, after all, our most valuable timber, and for the present our great standby, has increased by 89,039 cubic feet, or nearly doubled, which shows a distinct recovery of the trade in this timber with Bengal.

The decrease in the yield of first and second-class timber-trees has taken place chiefly in the free grants made in the Lakhimpur district, which are less by 72,391 cubic feet in the year under report than what they were in 1885-86.

The yield in poles has been less by 32,776 cubic feet, whilst that of boats increased by 40,449, and that of dead wood by 122,479 cubic feet.

197 The yield from the Government forests in Cachar and Sylhet has increased by 50,052 cubic feet in logs and 1,763 cubic feet in posts and planks, whilst the firewood decreased by 44,933 cubic feet.

198. When considering the total yield of the Government forests, as compared with that from foreign and private forests, the above figures show that the yield from the former has considerably increased, whilst that from the latter two has decreased. The falling

off in the yield of foreign forests is to be attributed to the disturbed state of Manipur, and the unusually low water at the close of the season in the rivers by which timber from Hill Tippera is floated.

The decrease in the yield of private forests is due to the more correct appreciation of forest property by the owners and their agents, who overworked their forests a few years ago.

199. The area of forest land allotted for cultivation, and the revenue realised on this account, as well as the average amount realised per acre, has been less in the year under report than in 1885-86, as will be seen from the following statement, and it will naturally fluctuate in accordance with the more or less favourable results of tea cultivation, for which latter most of the waste land, and particularly forest land, is taken up in this Province:—

Name of division.	Area of forest land allotted for cultivation in acres.				Amount of forest revenue realised and due.				Average amount per acre.			
	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.
					Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Darrang	2,467	174	...	2,293	7,453	555	...	6,898	3 0 4	3 3 0	0 2 8	.....
Nowgong	3	...	...	3	9	...	...	9	3 0 0	.....	.....	.....
Sibságar	1,388	193	...	1,195	8,892	536	...	8,356	6 6 6	2 12 5	.....	3 10 1
Lakhimpur	655	329	...	326	1,726	1,438	...	288	2 10 1	4 6 0	1 11 1	.....
Cachar	2,711	1,855	...	856	6,001	8,361	2,360	...	2 3 5	4 8 1	2 4 8	.....
Sylhet	1,460	2,958	1,498	...	514	2,564	2,050	...	0 5 7	0 13 10	0 8 3	.....
Total	8,684	5,509	1,498	4,673	24,595	13,454	4,410	15,551	2 13 3	2 7 2	.....	0 6 1

200. The yield in India-rubber by the Assam forests has been ascertained, as in former years, by deducting imports from exports, the result of which shows that there have been only 2,277 maunds obtained from the Assam forests, as compared with 5,675 maunds in the previous year, which is the lowest yield there has been during last ten years, as shown below:—

Year.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
Quantity in maunds	7,184	3,081	5,512	4,374	5,951	4,743	8,150	7,290	5,675	2,277

This falling off in the yield the Conservator attributes to the severe tapping which the trees have had during the last few years in the North Caçhar and Nága Hills, where no control can be exercised, for the falling off has chiefly occurred in the Rubber shipped from Nowgong and Sibságar, and these two districts have hardly any Rubber-trees of their own, but that from the North Cachar and Nága Hills is exported through them.

201. The value of the Rubber-mahâls in the different districts in the year was as follows:—

	Rs.
Darrang	22,100
Nowgong	88
Lakhimpur	11,650
Cachar	500
Sylhet	250
Khási Hills	400
Total	34,988

or Rs. 3,810 more than in the previous year.

Account of produce removed by purchasers according to divisions.

Gáro Hills division.

202. The total number of trees sold to purchasers in the Gáro Hills division during the year under report was 734, as compared with 756 sold in the previous year, or a decrease of 22. There was, however, an increase of 102 in the sale of Sâl-trees, which shows the revival in the export of this timber to Bengal. It will require skilful management to induce *daffadárs*, or timber-cutters, to increase their fellings in the Gáro Hills, since the removal of timber is more difficult than in the plains; but, on the other hand, the trees in the hills are better, which ought to be a sufficient inducement to make these men work in the Gáro Hills.

The quantity of dead wood removed was also 96 pieces less than in the previous year, whilst 1,055 more dugouts were worked out, chiefly from the southern range by the Someswari river.

The number of trees removed from the shared zemindári forests increased to 205, as compared with 199 removed in the previous year.

203. In the sale of *gurkati* permits for unreserved timber and other minor produce required for domestic purposes by the inhabitants of the plains immediately adjoining the Gáro Hills, there has again been an increase, as will be seen from the table below, proving that the tax is light. Gáros receive these permits, as hitherto, for 6 annas each, whilst outsiders or foreigners pay Rs. 2 each:—

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
Gáro permits	2,385	2,300	1,730	2,282	2,764
Foreign	1,223	2,210	2,770	3,870	4,147
Total	3,581	4,510	4,500	6,152	6,911
In Government forests ...	3,043	4,029	3,925	5,284	5,678
„ shared forests.....	538	481	575	868	1,233
Total	3,581	4,510	4,500	6,152	6,911

Goálpára division

204. The increase in the trees removed from the forests in the Goálpára division during the year has been considerable The total sales came to 2,704 trees, as compared with 731 only sold in the previous year, and out of the increase of 1,973 trees, 1,585 were Sâl. Out of the total number sold, 2,549 came out of reserves and 155 out of district forests.

205. The royalty collected on forest produce at the Dhubri check station, because the produce had either not been marked or was not covered by a certificate or pass, came to Rs. 213.

Kámrúp division.

206. In the Kámrúp division 2,947 trees were sold to purchasers, of which 2,709 were Sâl, as compared with 1,542 sold in 1885-86. Out of these, 1,860 were converted into boats or dugouts, and 1,087 into logs. There was also a slight increase in the yield of dead Sâl posts, which came to 10,402, as compared with 9,093 worked out in the previous year.

The yield of the shared forests in the Khási Hills, which are also in charge of the Kámrúp Divisional Officer, has much increased during the year. It came to 1,311 trees, as compared with 334 trees sold in the previous year; of dead wood 7,720 pieces were removed, as compared with 2,302 in 1885-86. The royalty on this produce goes half to Government and half to the owners of the forests.

Darrang division

207. In the Darrang division the number of trees sold during the year was 904, as compared with 967 sold in the previous year. The falling off is attributed mainly to the temporary stoppage in the working of a saw-mill which replaced the old by new and improved machinery, and was moved from Balipara to Tezpur.

The sale of Cane has increased during the year to 20,658 bundles, as compared with 19,925 bundles removed in the previous year.

The sale of Charcoal has decreased, as it is bound to do in future, since less and less is used every year now for tea manufacture.

Nowgong division

208. In the Nowgong division the number of trees sold has been nearly doubled. It was 876 during the year, as compared with 488 sold in the previous year, and in all other forest produce there has been an increased sale as well, except Bamboos and Charcoal.

Sibságar division.

209. In the Sibságar division the number of trees sold has been 1,006, as compared with 2,221 sold in the previous year. Private forests in the Sibságar district are very extensive, and, besides this, much advantage has been taken of the existing rule that timber from beyond the Inner Line is not to pay royalty, which enables people to avoid paying the timber tax. The matter has been brought to the notice of the Chief Commissioner who has the question now under consideration. The removal of boats, or dugouts, bamboos, and cane has increased, whilst that of poles, dead wood, charcoal, firewood, and drift wood has slightly decreased.

Lakhimpur division

210. In the Lakhimpur division the number of trees sold was more than double that of 1885-86; they were 4,474, as compared with 2,022 sold in the previous year. Of the other forest produce, the India-rubber is the most important, and the different mahâls in the Lakhimpur district brought in a revenue of Rs. 11,650 during the year under report.

211. Next to India-rubber comes cane, the right to cut which has also been sold for part of the district as a mahâl, the remaining part having been left open for other traders. The revenue collected on this account was Rs. 3,340, as compared with Rs. 3,090 realised in the previous year.

212. In the Cachar division there has been a considerable increase in the quantity of timber worked out from the Government forests. The number of logs removed was 9,431, as compared with 6,126 removed in the previous year, whilst posts and planks have increased also; but there is a slight decrease in the firewood brought out. Full details about all forest produce brought out of the Cachar forest are given in Appendix XV. of this report.

Cachar division.

The increase in the consumption of the different classes of timber was as follows:—

	1885-86.	1886-87.
	C. ft.	C. ft.
First-class timber	28,364	32,428
Second „ „	19,358	28,545
Third „ „	169,923	309,112
Total	217,645	370,085

The proportion in which the number of logs exported from Cachar came from Government and foreign or from private forests is as follows:—

	1885-86.	1886-87.
From Government and foreign forests	2,631	3,894
From private forests	4,011	6,082
Total	6,642	9,976

The above and other details given in Appendix XV. show that out of the total yield of 18,810 logs from the Government, foreign, and private forests in Cachar, 8,834 remained in the Cachar district, and, out of the 16,661 maunds of firewood, only 752 were exported.

213. The yield of the North Cachar Hills continues to be small; it was, as heretofore, registered at Diyangmukh, and is shown in detail in Appendix XVI.

214. The quantity of first and second-class timber removed from the Government forests in the Sylhet division was less during the year under report, owing to the early fall of the rivers in the southern part of the district, or Patharkandi range, but there was an increase in the third-class timber, which was chiefly removed from the northern part of the district, or Kanairghat range. The quantities in cubic feet were as follows:—

Sylhet division.

	1885-86.	1886-87.
	C. ft.	C. ft.
First-class timber	25,689	13,059
Second-class „	4,122	3,698
Third-class „	20,136	39,103
Total	49,947	55,860

As regards other produce removed from the forests, there has been an increase in every description of it. Some eight different nallas or small streams were let to be cleared of obstructions in the way of snags; these leases fetched altogether Rs. 950.

215. The men appointed for carrying out the revenue control in the newly-gazetted protected forests collected altogether Rs. 2,731, on which 10 per cent. commission, or Rs. 273, became due; but, of this Rs. 184 only were paid during the year.

216. The Rubber-mahál in the Patharkandi range was sold for one year from the 20th January 1887, for Rs. 500, of which Rs. 250 were realised during the year.

The Agar-mahál was sold for three years at Rs. 500 per annum from the 1st of March 1887, and Rs. 320 realised during the year on this account.

A sum of Rs. 834 was realised on account of trees standing on land allotted for cultivation.

217. The Chief Commissioner has decided during the year that no duty is to be collected on the timber imported into the Sylhet district from Hill Tippera; but, to protect the Government forests and to prevent smuggling of timber from them, Tippera timber has to be covered in future by passes granted at the different forest revenue or pass-stations. The export of logs from Hill Tippera was only 1,975, as compared with 2,509. The decrease is attributed to the low state of the Juri river towards the close of the season. The export of all other forest produce increased.

218. An account of the removal of Sal and other trees from the shared forests of Jirang and Nungspung, in the Khási Hills, has already been given above under the Kámrúp division, because they are managed by the officer in charge of that division.

Khási and Jaintia Hills division.

Besides those, there were 187 dugouts, 440 dhams, 863 posts, and 200 planks removed from the Nongkhlao shared forests, as well as 45,598 cubic feet of timber, and other wood removed, at a total income of Rs. 3,054, most of which was pine timber from the Shillong forests. The latter was used by the Military Department for new barracks.

Free grants of forest produce.

219. The policy of granting to ryots, free of royalty, unreserved trees and minor forest produce, required by them for home consumption, remained unchanged during the year, with the exception that the fee payable on a home-consumption permit was raised in Cachar and Sylhet from eight annas to one rupee. In the valley districts no fees are levied for these permits at present.

Every effort was made to insure more circumspection being used when granting forest produce free, and that this has been the case is proved by the fact that the amount of free grants has been not much more than half of that granted in the previous year. Besides which, there is no doubt that when home-consumption permits were issued first ryots availed themselves of this privilege quickly and to the fullest extent, so that their requirements in the year under report were naturally much less in consequence.

220. The forest produce granted free, and its value, is shown in full detail in the Tabular Statements Nos. 54 and 55 attached to this report. The value of free grants in the different districts was as follows:—

	Rs.
Gáro Hills	310
Goálpára	5,352
Kámrúp	3,730
Darrang	4,891
Nowgong	6,673
Sibságar	9,100
Lakhimpur	14,873
Cachar	559
Sylhet	8,052
Khási Hills	5
Total	53,545

221. Besides the above, there were the free grants made to the Assam Railways and Trading Company, which were, in the year under report, as follows:—

Description of trees.	Number.	Rates. Rs.	Value. Rs.	Purpose for which used. For sleepers.	For buildings.	For other purposes.
First-class trees	624	6	3,744	498	126	.....
Second-class „	908	2	1,816	188	720	.....
Total	1,532	...	5,560	686	846	...

Imports and exports of forest produce.

222. The timber imported from the private forests of Maudam in the Khási Hills into Assam was as follows:—

Sal logs	428
Sal sleepers	100
Dugouts	47
Dead Sal posts	718

223. The import of forest produce into Cachar from Manipur and the Lushai Hills during the year were as follows:—

Timber (logs)	183
Poles	40
Bamboos	280,937
Canes, bundles	1,805

224. The import of Rubber for the last five years into Assam has been the following:—

	1882-83. Maunds.	1883-84. Maunds	1884-85. Maunds.	1885-86. Maunds.	1886-87. Maunds.
Bhutan	24	86	20	31	97
Towang	1,549	248	134	175	267
Dafla Hills	535	221	137	459	86
Nága, Mishmi, and Singpho Hills	1,909	828	287	215	597
Lushai Hills	601	135	224	55	550
Manipur	168	124	.....	48	.....
Total	4,586	1,642	802	983	1,597

The export of Rubber for the last five years by steamer has been as follows:—

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Maunds.	Maunds.	Maunds.	Maunds.	Maunds.
From Goálpára.....	615	1,484	588	728	297
„ Kámrúp	605	80	100	641	149
„ Darrang	2,152	2,624	2,717	1,440	1,375
„ Nowgong	1,622	1,154	963	1,510	323
„ Sibságar.....	428	684	200	741	197
„ Lakhimpur.....	3,241	3,289	2,752	1,429	1,463
„ Sylhet.....	666	462	110	26	59
„ Cachar	.....	15	99	8	11
Total	9,329	9,792	7,529	6,523	3,874

Besides the above, 165 maunds were exported by boat from Cachar and Sylhet, which brings up the total export of India-rubber to 4,039 maunds, as compared with 6,658 maunds exported in 1885-86.

225. The information about the export of Rubber by steamer was, as heretofore, obtained from the Bengal Government, because the registration is done in Calcutta; but there is very serious reason to think that not nearly all the Rubber exported from Assam is registered in Calcutta. The Conservator is making enquiry from the Steamer Agents as regards the amount of India-rubber shipped, and thus hopes to clear up the uncertainty existing at present on this point.

226. The provincial imports and exports of forest produce, as registered at Dhubri on the Brahmaputra, and Bhairab Bázár on the Megna river, were the following:—

Name of forest produce.	Denomination.	Registered at Dhubri.				Registered at Bhairab Bázár.			
		Imports.		Exports.		Imports.		Exports.	
		By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.
Timber	Number.	...	685	368,741	31	400	1,714	1,328	...
Caoutchouc	Maunds...	...	24	.....	3,803	...	2	165	240
Lac ... Stick	„ ...	...	...	396	3,087	...	.....	120	...
Lac ... Shell	„ ...	...	...	6,285	17,944	...	.....	80	110
Lac-dye	„ ...	...	3	.....	.....	...	.....	.....	...
*Bamboos	Number...	...	..	25,820	.....	...	.....	527,000	...
Thatching-grass	„ ...	...	...	11,745,700	.....	...	.....	.....	...
Reeds (ekra nol).....	„ ...	...	...	34,830	.....	...	.....	.....	...
Canes	„ ...	...	990	338,324	.....	...	.....	5,510	...

The imports of forest produce continue insignificant. Nearly the whole of the timber shown as imported consists of tea-boxes, as in former years.

Of the forest produce registered at Dhubri as exported, the following was used either at the station of Dhubri itself or in the district:—

Timber	11,374 logs.
Bamboos	25,820
Canes	1,325 bundles

The export of timber, as registered at Dhubri and Bhairab Bázár during the year, increased by 3,485 pieces, and thatching-grass by 4,621,350 bundles; but there was a decrease in the export of reeds by 50,146 bundles, and in cane a decrease of 5,235 bundles.

The export of bamboos increased by 255,220, and they are entirely exported from the Surma Valley. The small quantity registered at Dhubri was used at that station.

There has been a falling off in the export of stick lac. It decreased by 10,216 maunds, whilst the export of shell-lac increased by 8,145 maunds.

CHAPTER V.—FINANCIAL RESULTS.

General.

227. The forest receipts during the year under report were Rs. 15,354 more than in the previous year, and they would have been much higher even, had it not been found necessary to allow the felling of most of the trees in the Goálpára and Kámrúp divisions on part payment of revenue only, so as to help the timber-cutters over their pecuniary difficulty, inasmuch as all these men had spent their savings of former times during the previous two or three years, when the stagnation in the export trade of Sal obliged them to stop their works, on account of the low prices realised by their timber, which did not compensate them for their labour. The revenue thus outstanding in those two divisions amounts to Rs. 24,580.

The increase in the revenue occurred in the Goálpára and Kámrúp divisions, as already said, on account of the improvement of the export trade in Sal, whilst in the Nowgong, Lakhimpur, Cachar, and Sylhet divisions the increase is due to the larger local demands. The increase in the Lakhimpur division is the largest on account of the high price obtained by the rubber and cane *maháls.*

228. The forest expenditure has been about the same as last year.

Under "A—Conservancy and works" the expenditure was less by Rs. 13,317 on account of the efforts made generally to reduce expenditure, wherever this was possible without causing retrogression, and under "B.—Establishments," the expenditure was Rs. 14,111 more, chiefly on account of the promotion of the several officers and the additional appointment of one Assistant and one Sub-Assistant Conservator, of whom the department had been short in the previous year.

229. The financial result of the year's working is a small deficit of Rs. 276-10, which the Conservator had hoped to prevent, but, for reasons already stated above, *viz.*, that much revenue had to be left outstanding, this became impossible. A reference to Statement No. 60 will show that the revenue outstanding at the end of the year was Rs. 52,109, as compared with Rs. 14,722 only outstanding at the close of the year 1885-86.

230. The value of the free grants made during the year amounted to Rs. 58,781 only, or Rs. 10,321 less than in the previous year.

231. The proportion of the revenue collected by the Forest Department, and such as was collected by the Revenue Department, is shown in Appendix XVII., attached to this report. This distinction is, as has been pointed out in former reports, entirely an artificial one, of no practical value, as was fully explained in paragraphs 237 to 239 of the Report for 1884-85.

232. The receipts and expenditure arranged under the three great heads "I.—Departmental timber operations," "II.—Other revenue," and "III.—Formation, protection, and improvement of forests" are shown in the Tabular Statement No. 62, attached to this report. The totals under these heads, as compared with those of the previous year, were the following:—

	1885-86.		1886-87.	
	Receipts.	Charges.	Receipts.	Charges.
	Rs	Rs	Rs	Rs
I.—Departmental timber operations ...	1,912	1,602	2,612	2,765
II.—Other revenue	1,94,745	74,062	2,09,399	81,186
III.—Formation, protection, and improvement of forests	.....	1,35,830	.....	1,28,336
Total	1,96,657	2,11,494	2,12,011	2,12,287

The distribution of the receipts and expenditure under the above three heads is that under head "I.—Departmental timber operations," all receipts under the budget main heads I. and III. and charges under AI. and AIII. were included.

The amount under "II.—Other revenue" includes all the receipts not shown under head I. and charges under the budget heads AII., IV., V., IX., one quarter of VI. and half of "B.—Establishments."

The amount shown under head "III.—Formation, protection, and improvement of forests" includes the charges under A.VII., VIII., three-quarters of VI., and half of "B—Establishments."

Revenue

233. The forest receipts during the year were, as compared with the previous year, the following:—

Revenue budget heads.	1885-86.	1886-87.	Increase.	Decrease.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency	595 13 0	386 1 9	.....	209 11 3
II.—Ditto by consumers and purchasers	1,79,226 13 6	1,83,060 0 9	3,833 3 3	.....
III.—Drift and waif-wood and confiscated forest produce	1,316 10 9	2,225 3 6	908 8 9	.....
IV.—Revenue from forests not managed by Government...	10,271 0 9	10,628 8 8	357 7 11	.....
V.—Miscellaneous	5,246 5 11	15,710 14 1	10,464 8 2	.....
Total	1,96,656 11 11	2,12,010 12 9	15,563 12 1	209 11 3

The above figures show that there has again been an increase in receipts under every head but "I.—Timber and other produce removed from the forests by Government agency."

The falling off under "I.—Timber" is but slight. It occurred in the Gáro Hills division, where Mr. Campbell's attention was much divided on account of his having also been in charge of the Working Plans Division, and there is every probability that the receipts under that head in the current year will be considerable, as the Divisional Officer can now give ample time to the timber works, and has Mr. Kelly to assist him, the Working Plans Division having been placed in charge of Mr. Fisher.

The increase under "II.—Timber and other produce removed from the forests by consumers and purchasers" is due to increased receipts in the Goálpára, Kámrúp, Nowgong, Lakhimpur, and Cachar divisions, in all of which the revenue was considerably higher under this head, which, however, was partly counterbalanced by decreased receipts under this head in other divisions.

The increase under "III.—Drift and waif wood and confiscated forest produce" is not much, and is more or less incidental; it occurred chiefly in the Gáro Hills, Kámrúp, and Sibságar divisions.

The increase under "IV.—Revenue from forests not managed by Government" is slight, and has entirely to be attributed to the greater activity of the timber-cutters in the Jirang forest in the Khási Hills.

The increase under "V.—Miscellaneous" is unusually large, and occurred chiefly in the Cachar and Sylhet divisions. It is explained by the change made in classifying permit fees now under this head instead of under II., as used to be the practice.

Expenditure.

234. The expenditure during the year under report, as compared with that of the previous year, was as follows:—

Budget head.	1885-86.	1886-87.	Increase.	Decrease.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
A.—CONSERVANCY AND WORKS.				
I.—Timber and other produce removed from the forests by Government agency.	1,538 9 0	2,686 4 0	1,147 11 0	.....
II.—Timber and other produce removed from the forests by consumers and purchasers.	6,595 8 8	6,103 13 4	.....	491 11 4
III.—Drift and waif-wood and confiscated forest produce.	63 3 0	79 6 0	16 3 0	.....
IV.—Revenue from forests not managed by Government.	.....	.....	.....	.....
V.—Rent of leased forests, and payments for shareholders in forests managed by Government	.....	.....	.....	.....
VI.—Live and dead stock	11,296 11 10	12,940 2 1	1,643 6 3	.....
VII.—Communications and Buildings	28,350 0 3	11,780 7 2	.....	16,569 9 1
VIII.—Demarcation, improvement and extension of forests	39,502 4 4	40,290 12 5	788 8 1	.....
IX.—Miscellaneous	5,138 10 6	5,287 1 0	148 6 6	.....
Total of A—Conservancy and works...	92,484 15 7	79,167 14 0	3,744 2 10	17,061 4 5
B.—ESTABLISHMENTS.				
I.—Salaries	95,878 11 3	1,06,123 15 9	10,245 4 6	.....
II.—Travelling allowances	18,177 14 9	22,697 9 1	4,519 10 4	.....
III.—Contingencies	4,952 2 6	4,297 15 11	.....	654 2 7
Total of B—Establishments	1,19,008 12 6	1,33,119 8 9	14,764 14 10	654 2 7
Grand Total of Expenditure	2,11,493 12 1	2,12,287 6 9	18,509 1 8	17,715 7 0

The increase under "AI.—Timber and other forest produce removed from the forest by Government agency" is due entirely to the timber works started by the department in the Dambu forest in the Gáro Hills.

The slight decrease under "AII.—Timber and other produce removed from the forests by consumers or purchasers" is accounted for by a decrease in the temporary establishments charged under this head in the Gáro Hills and Kámrúp divisions.

The increase under "A.VI.—Live and dead stock" is due entirely to the purchase of mathematical instruments in the Working Plans Division.

The large decrease under "A.VII.—Communications and buildings" is due to the fact that the Damra-Dambu road was completed in the previous year, and had been made over to the Department Public Works in the year under report.

The increase under "A.VIII.—Demarcation, improvement, and extension of forests" is small and incidental. There has been an increase under some of the sub-heads, and a decrease of small amount under others, for which no particular reason can be assigned without going into great detail.

The increase under "A.IX.—Miscellaneous" is small, and entirely accounted for by the starting of the Working Plans Division.

The increase under "B.—Establishments, I. Salaries" is accounted for, partly by the promotion of officers and the posting of two new officers to the Province during the year, and the increase under "B.II.—Travelling allowance" is accounted for in the same way.

The decrease under "B.III.—Contingencies" occurred chiefly under the sub-head (*f*) Sundries," and is distributed amongst most of the divisions.

Surplus and deficit according to divisions.

235. Receipts and expenditure in the different divisions and their respective surplus or deficit are shown in the following table:—

Name of division.	Receipts.			Expenditure.			Surplus.			Deficit.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Direction	32	12	0	26,021	2	11	.....			25,988	6	1
Working Plans	.....			12,545	3	6	.....			12,545	3	6
Gáro Hills	16,755	8	7	27,981	1	9	.....			11,225	9	2
Goálpára	18,449	0	0	21,061	13	4	.....			2,612	13	4
Kámrúp	36,960	8	9	27,122	8	8	9,838	0	1	.....		
Darrang	29,249	12	2	23,109	6	2	6,140	6	0	.....		
Nowgong	5,508	7	10	7,878	9	6	.....			2,370	1	8
Sibságar	8,787	13	1	18,755	3	1	.....			9,967	6	0
Lakhimpur	27,262	10	0	22,123	8	1	5,139	1	11	.....		
Cachar	44,429	1	6	15,360	11	9	29,068	5	9	.....		
Sylhet	19,812	1	0	7,349	6	5	12,462	10	7	.....		
Khási and Jaintia Hills	4,763	1	0	2,978	11	7	1,784	5	5	.....		
Total	2,12,010	12	9	2,12,287	6	9	64,232	13	9	64,709	7	9

This is the first year the Wor kingPlans Division has been organised. Its expenditure during the year under "A.—Conservancy and works" was under three heads, *viz.*, Stores, Surveys, and Miscellaneous charges. The cost of instruments came to Rs. 2,297, whilst that of surveys was Rs. 8,078, and the Miscellaneous expenditure came to Rs. 160. The expenditure under "B.—Establishments" amounted to Rs. 2,010.

The receipts in the Gáro Hills division were less by Rs. 2,058 than in the previous year, which, the Divsional Officer explains, is due to an exceptionally large amount of outstanding revenue having been realised in 1885-86. The expenditure has been greatly reduced under "A.—Conservancy and works." It was Rs. 11,613, as compared with Rs. 28,297, but under "B.—Establishments" it came to Rs. 16,367, as compared with Rs. 14,150 spent in the previous year, on account of there having been an additional officer posted to this division. The deficit is less than half of what it was in 1885-86, and there ought to be a surplus in future years.

In the Goálpára division the receipts, as shown in the above statement, are slightly higher than in the previous year; but, besides this, there is a large amount of revenue outstanding. The expenditure is more than in the previous year, because a higher-paid officer had charge of the division, and this causes the deficit to be larger than it was last year. If, however, the timber trade goes on improving, as it has done this year, there will be a considerable surplus in the current year and hereafter.

In the Kámrúp division the receipts increased largely. They were Rs. 36,960, as compared with Rs. 22,262 in the previous year. This is due to some extent to receipts from the private forests of Jirang and Nungspung formerly shown in the Khási Hills division, having this year been credited in the Kámrúp division, but also to the revival of the timber trade. The expenditure is much the same as in 1885-86, and cannot well be reduced without lessening efficiency. The result has been a surplus of Rs. 9,838, instead of a deficit of Rs. 4,805, as was the case last year.

In the Darrang division receipts have fallen off on account of less forest land having been allotted for cultivation; but expenditure has also been reduced as far as practicable, which makes the surplus about Rs. 1,000 more than in the previous year.

In the Nowgong division receipts have increased to Rs. 5,508, as compared with Rs. 955 only collected in the previous year in consequence of improved control by a separate Divisional Officer and a slight increase in the subordinate establishment. The latter naturally has increased expenditure as well, and leaves the deficit higher than it was in the previous year. But the Conservator feels confident that continued vigilance on the part of the Divisional Officer will soon result in a surplus, as the financial result of working this division.

The Sibságar division is, as it has been hitherto, a poor one from a financial point of view, because the private forests in possession of tea-planters are very extensive; and, in addition to this, as already said, the rule that timber from beyond the Inner Line was not to pay royalty, has enabled timber-cutters to defraud Government. The Chief Commissioner has, however, consented now to alter this rule to prevent similar cheating being practised in future. The result of this has been that, although the expenditure was kept down rigidly, there has been a deficit of Rs. 9,967.

In the Lakhimpur division receipts have increased considerably, chiefly on account of the sale of the Rubber and Cane-maháls, whilst expenditure has been restricted; the result has been a surplus of Rs. 5,139, as compared with a deficit of Rs. 6,715 in the previous year.

In the Cachar division receipts have also increased, and expenditure been restricted, resulting in a large surplus of Rs. 29,068, demonstrating forcibly of what great importance a steady local demand for forest produce is, and what calls will be made on, and what income may be expected from, our forests in the valley districts when the country becomes more opened out.

These remarks also apply to the Sylhet division, where receipts have risen to Rs. 19,812, or more than three times what they were in 1881-82. The expenditure also increased slightly to Rs. 7,349, leaving a surplus of Rs. 12,463, which must be considered as very satisfactory, considering that this is only the second year this division has had a Forest Officer in charge of it, and been properly organised.

The Khási and Jaintia Hills division shows a falling off in receipts, which, however, is not real, inasmuch as it is due to the revenue from the private forests of Jirang and Nungspung in the Khási Hills having been shown in the Kámrúp division, because these forests are managed by the Forest Officer in charge of the latter.

Value of stock at the end of year.

236. The value of live and dead stock at the close of the year was Rs. 21,276 more than at the commencement, as will be seen from Statement No. 57 attached to this report.

Outstanding revenue.

237. The amount of revenue outstanding at the close of the year, as shown in Statement No. 60, was Rs. 37,388 more than at the close of the previous year.

CHAPTER VI.—General Remarks.

Establishments.

238. One of the trained officers who arrived during the year from England, Mr. C. P. Fisher, was appointed to Assam, which made the controlling staff complete, and another officer, Mr. J. C. Kelly, was transferred from the Survey to this department, and appointed Sub-Assistant-Conservator, thus also making the executive staff sanctioned for this Province complete.

239. Mr. D. P. Copeland was promoted during the year to Assistant-Conservator, first grade, with effect from the 11th November 1885.

Mr. T. J. Campbell officiated for three months in the first grade of Assistant-Conservators.

Mr. H. G. Young passed in the lower standard of Bengali, and was promoted to Assistant-Conservator, second grade.

Conservator's Tour.

240. The Conservator left Shillong on the 2nd of October 1886 to be present at the Forest Conference held at Dehra Dun, and returned on the 9th of November to head-quarters; he left again on the 4th of December 1886, and returned on the 14th May 1887 from tour.

The number of days spent in each forest division was as follows:—

Gáro Hills	division ...	14 days.
Goálpára	„ ...	31 „
Kámrúp	„ ...	23 „
Darrang	„ ...	8 „
Sibságar	„ ...	16 „
Lakhimpur	„ ...	8 „
Cachar	„ ...	14 „
Sylhet	„ ...	17 „
Khási Hills	„ ...	31 „

Services of Officers.

241. Mr. J. T. Jellicoe had charge of the Darrang division during the whole year, besides this, he had also charge of the Nowgong division during the 2½ months Babu Jogesvar Sur was on privilege leave. He was absent from head-quarters for 288 days.

Mr. A. J. Mein was in charge of the Kámrúp division throughout the year, and travelled for 144 days.

Mr. C. G. D. Fordyce had charge of the Sibságar division from the commencement of the year until the 1st of November, when he received charge of the Lakhimpur division, which he kept up to the close of the year. He was in charge of both the Sibságar and Lakhimpur divisions during October 1886, when Mr. Barker had privilege leave, and travelled for 164 days.

Mr. F. S. Barker was in charge of the Lakhimpur forest division from the commencement of the year until the 1st of October, when he had privilege leave for one month, and from the 1st of November to the close of the year he was in charge of the Sibságar division. He travelled for 206 days out of the 11 months he was on duty.

Mr. D. P. Copeland was in charge of the Goálpára division during the whole year, and travelled for 184 days.

Mr. T. J. Campbell was in charge of the Gáro Hills and Working Plans divisions throughout the year and travelled for 255 days.

Mr. H. G. Young was in charge of the Cachar division throughout the year, and travelled for 138 days.

Mr. C. P. Fisher joined the department on the 14th December 1886, and was attached to the Working Plans division up to the close of the year; he was in camp the whole time, 107 days.

Mr. J. C. Kelly joined the Department on the 1st of July 1886, and was attached to the Gáro Hills division until the close of the year. He was absent from head-quarters for 164 days out of the 274 days he was on duty.

Babu Jogesvar Sur was in charge of the Nowgong division for 9½ months, and had privilege leave for 2½ months. He travelled for 169 days.

Babu Tara Kisor Gupta was in charge of the Sylhet division during 11 months of the year, having had one month's privilege leave granted him. He travelled for 134 days during the time he was on duty.

ANNUAL FORM No. 49.

Forest Department, Assam.—Area of Classed and Unclassed State Forests and Waste Lland, 1886-87.

Division.	Range	Civil district or territory.	Name of forest.	Area on 1st April 1886.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1887.		Number and date of notification of addition or transfer
				Acres.	Equivalent in square miles	Acres.	Acres.	Acres.	Equivalent in square miles.	
			A.—Classed State Forests and Waste Lands.							
			(a) *Reserved Forests.*							
Gáro Hills	Northern Range	Gáro Hills District.....	Dibru Hill	6,080	9	.....	.....	6,080	9	
"	" "	" "	Jinari	6,640	10	.....	.....	6,640	10	
"	" "	" "	Chima and Bangshi	8,680	14	.....	.....	8,680	14	
"	" "	" "	Dhima	5,760	9	.....	.....	5,760	9	
"	" "	" "	Dilma	1,120	2	.....	.....	1,120	2	
"	" "	" "	Rajasimla.....	4,800	7	.....	.....	4,800	7	
"	" "	" "	Ildek.....	1,280	2	.....	.....	1,280	2	
"	" "	" "	Darugiri	2,283	4	.....	.....	2,283	4	
"	" "	" "	Rongrengiri	8,480	13	.....	.....	8,480	13	
"	Southern "	" "	Emangiri	2,080	3	.....	.....	2,080	3	
"	" "	" "	Rewak	1,280	2	.....	.....	1,280	2	
"	" "	" "	Siju	1,280	2	.....	.....	1,280	2	
.....	" "	" "	Bolsalgiri	640	1	.....	.....	640	1	
"	" "	" "	Tura	480	1	.....	.....	480	1	
.....	Northern "	" "	Dambu	4,364	7	.....	.....	4,364	7	
.....	" "	" "	Songsak	9,280	15	.....	.....	9,280	15	
"	Southern "	" "	Bagmara	.....	.....	12,320	.....	12,320	19	No. 12, dated 24th February 1887.
			Total.....	64,527	101	12,320	.....	76,847	120	
Goálpára	Eastern "	Goálpára "	Bijni Duár	8,038	13	75,526	.....	83,564	131	No. 14, dated 5th March 1887.
"	" and western range	" "	Chirang Duar No. I.	69,203	108	.....	.....	69,203	108	
"	Western range	" "	" " No. II.	90,643	142	.....	.....	90,643	142	

ANNUAL FORM No. 49.—(*Continued.*)

Division.	Range.	Civil district or territory.	Name of forest	Area on 1st April 1886.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1887.		Number and date of notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Goálpára	Western Range	Goálpára District	Ripu Duár	41,632	65	.....	.....	41,632	65	
"	Guma "	" "	Guma	15,776	25	.....	.....	15,776	25	
"	Eastern "	" "	Sidli	43,757	68	.....	.....	43,757	68	
"	Western "	" "	Jengasi Charaidaka	1,730	3	.....	.....	1,730	3	
"	" "	" "	Atiabari	9,180	14	.....	.....	9,180	14	
"	Eastern "	" "	Bengtol and Darogoan	7,470	12	.....	.....	7,470	12	
"	" "	" "	Bhumeswar Hills	4,033	6	.....	.....	4,033	6	
"	Western "	" "	Panbari, and Pechadaveri	.....	.....	3,290	.....	3,290	5	No. 14, dated 5th March 1887.
"	Eastern "	" "	Bhur	.....	.....	3,855	.....	3,855	6	
			Total	291,462	456	82,671	.....	374,133	585	
Kámrúp	Kulsi "	Kámrúp District	Barduar	15,896	25	.....	.....	15,896	25	
"	" "	" "	Pantan	21,910	34	.....	.....	21,910	34	
"	Jirang	" "	Mataikhar	2,240	3	.....	.....	2,240	4	
"	Kulsi "	" "	Kulsi plantation	3,680	6	.....	.....	3,680	6	
"	Rani "	" "	Jara	1,037	2	.....	.....	1,037	2	
"	Kulsi "	" "	Milmillia	3,610	6	.....	.....	3,610	6	
"	" "	" "	Mayang	4,800	7	.....	.....	4,800	7	
"	Rani "	" "	Rani	11,070	17	.....	35*	11,035	17	
"	" "	" "	Kawasing	3,570	6	.....	.....	3,570	6	
"	Singra "	" "	Simla Hills	317	.....	.....	.....	317	.....	
"	" "	" "	Dumpara	497	1	.....	.....	497	1	
"	" "	" "	Khaksi, Sikrabura Hill	2,530	4	.....	.....	2,530	4	
"	" "	" "	Ghoraputa	120	.....	.....	.....	120	.....	
"	" "	" "	Khatkhati Hills	644	1	.....	.....	644	1	
"	" "	" "	Taraibari	806	1	.....	.....	806	1	
"	" "	" "	Garubaldha	240	.....	.....	.....	240	.....	
"	" "	" "	Khurkhuri	149	.....	.....	.....	149	.....	
"	" "	" "	Sursuria Hills	970	2	.....	.....	970	2	
"	" "	" "	Gizang	930	1	.....	.....	930	1	
"	" "	" "	Jaipur	774	1	.....	.....	774	1	
"	" "	" "	Baradobha	1,190	2	.....	.....	1,190	2	
"	" "	" "	Nampathar	640	1	.....	.....	640	1	

"	" "	" "	Barjuli	1,120	2	.....	.....	1,120	2	
"	Northern Range	" "	Hajo	243	.....	.....	.....	243	.....	
"	Kulsi "	" "	Chhaygoan	2,705	4	.....	.....	2,705	4	
			Total	81,688	126	.....	35	81,653	127	
Darrang	Central "	Darrang District	Balipara	56,224	88	.....	.....	56,224	88	
"	Western "	" "	Khalingduar	6 240	10	.....	.....	6,240	10	
"	" "	" "	Addition to Khalingduar	6,972	11	.....	.....	6,972	11	
"	Central "	" "	Charduar	64,141	100	.....	.....	64,141	100	
"	" "	" "	Bhamaraguri	386	1	.....	.....	386	1	
"	" "	" "	Garumari	205	.....	.....	.....	205	.....	
"	Eastern "	" "	Nowduar	52,480	82	.....	.....	52,480	82	
"	Central "	" "	Singri Hill	1,200	2	.....	.....	1,200	2	
			Total	187 848	294	.....	.....	187,848	294	
Nowgong	Western "	Nowgong "	Kholahat	1,878	3	.....	.....	1,878	3	
"	Eastern "	" "	Deboka	520	1	.....	.....	520	1	
"	" "	" "	Diju	2,730	4	3,012	.....	5,742	9	
"	" "	" "	Suang	.....	.....	1,924	.....	1,924	3	No. 17, dated 17th March 1887.
"	" "	" "	Bamuni	.....	.....	499	.....	499	.....	
"	" "	" "	Rangkhang	.....	.....	6 339	.....	6,339	10	
"	" "	" "	Sonaikusi	.....	.....	10,754	.....	10,754	17	
			Total	5,128	8	22,528	.....	27,656	43	
Sibságar	Golághát "	Nága Hills "	Nambor	2,49 312	390	.....	.....	249 312	390	
"	" "	" "	Mikir Hill	51 840	81	.....	.....	51,840	81	
"	" "	" "	Upper Daigurung	5,312	8	.....	.....	5,312	8	
"	" "	" "	Lower "	5 120	8	.....	.....	5,120	8	
"	Jorhát "	Sibságar "	Holongapar	4.892	8	.....	.....	4 892	8	
"	Sibsagar "	" "	Derai	11.773	18	.....	.....	11,773	18	
"	" "	" "	Abhoypur	15,911	25	370*	.....	16,231	25	
"	" "	" "	Sola	1 661	3	.....	.....	1,661	3	
"	Jorhát "	" "	Desai	6,893	11	.....	40*	6 853	11	
			Total	352,714	552	370	40	353,044	552	
Lakhimpur	Dibrugarh "	Lakhimpur "	Dehingmukh	.....	.....	13,747	.....	13,747	21	No. 22, dated 31st March 1887.
			Total	.....	.....	13,747	.....	13,747	21	
Cachar	Sonai Range	Cachar District	Upper Jiri	15,360	24	.....	.....	15,360	24	
"	" "	" "	Lower "	8,960	14	.....	.....	8,960	14	
"	" "	" "	Barak	42,880	67	.....	.....	42,880	67	
"	" "	" "	Sonai	11,520	18	.....	.....	11,520	18	
"	Matijuri Range	" "	Katakhal	51,200	80	.....	.....	51 200	80	
"	" "	" "	Dhaleswari	21,120	33	.....	.....	21,120	33	
"	" and Sonai Range	" "	Inner Line	325,760	509	.....	.....	325,760	509	
			Total	476,800	745	.....	.....	476.800	745	

* Rectification of boundary.

ANNUAL FORM No. 49.—(*Concluded.*)

Division.	Range.	Civil district or territory.	Name of forest	Area on 1st April 1886		Added during the year	Excluded or transferred to other heads	Area on 31st March 1887		Number and date of notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres	Acres.	Acres.	Equivalent in square miles.	
Sylhet	Kanairghat Range	Sylhet District	Langai and Singla	.....	.....	108,800	.....	108,800	170	No 57, dated 17th September 1886.
			Total.....	.....	.....	108,800	.....	108,800	170	
Khási and Jaintia Hills.	Jowai "	Khási and Jaintia Hills District	Saipung	32,000	50	.....	.....	32,000	50	
			Total.....	32 000	50	.....	.....	32,000	50	
			Grand Total	1 492,167	3,232	240,436	75	1,732,528	2,707	
			(*b*) *Protected Forests*							
Kámrúp	Singra Range	Kámrúp District.....	Jharikhuri	1,23 5	2	.....	.....	1,235	2	
"	" "	" "	Bura Gohain	620	1	.....	.....	620	1	
"	" "	" "	Mogakhal	180	.....	.....	.....	180	.....	
			Total..	2,035	3	.....	.....	2,035	3	
Sibságar	Sibságar "	Sibságar "	Panidehingia	19,200	30	.....	.....	19,200	30	
			Total.....	19,200	30	.....	.....	19,200	30	
Lakhimpur	North Lakhimpur Range	Lakhimpur "	Bharalwah	5,280	8	.....	.....	5,280	8	
"	" " ...	" "	Kuddum	15,866	25	.....	.....	15,866	25	
"	Dibrugarh " ...	" "	Parapara	26,720	42	.....	.....	26,720	42	
"	Makum " ...	" "	Upper-Dehing.....	1,51,584	237	.....	900†	1,50,684	236	
"	Dibrugarh " ...	" "	Dehingmukh	13,747	22	.....	13,747‡	.....	.....	No. 22, dated 31st March 1887.
"	" " ...	" "	Jokai	12,954	20	.....	.....	12,954	20	
"	Makum " ...	" "	Solaguri	68,122	106	.....	.....	68,122	106	
			Total.....	294,273	460	.....	14,647	279,626	437	

			North Cachar Hills.							
Cachar	North Cachar	Cachar District	Kapili Diyang	128,000	200	196,800*	.....	191,200	299	
"	" "	" "	Diyang Mati					54,080	84	
"	" "	" "	Mupa Mahar					20,960	33	
"	" "	" "	Langting Mupa					58,560	92	
			Total	128,000	200	196,800	.....	324,800	508	
Sylhet	Kanairghat	Sylhet "	Langai and Singla	108,800	170	.....	108,800	.....	.....	No. 57, dated 17th September 1886.
"	Patharkandi	" "	Raghunandan Hills	.....	.....	33,920	.....	33,920	53	No. 18, dated 12th May 1886.
"	"	" "	Tarap Hills	.....	.....	37,760	.....	37,760	59	
"	"	" "	Putijuri Hills	.....	.....	40,960	.....	40,960	64	
"	"	" "	Dinarpur	.....	.....	4,480	.....	4,480	7	
"	"	" "	Patharia	.....	.....	35,442	.....	35,442	55	
"	"	" "	Dewalia	.....	.....	5,760	.....		9	
			Total	108,800	170	158,322	108,800	158,322	247	
			Grand Total	552,308	863	355,122	123,447	783,983	1,225	
			(b) Unclassed State Forest and Waste Land.							
Goálpára	.....	Goálpára District	Within revenue limits	141,930	222	.....	82,671‡	59,259	93	No. 14, dated 5th March 1887.
Kámrúp	.....	Kámrúp "	" "	319,426	499	35	.....	319,461	499	
Darrang	.....	Darrang "	" "	120,055	188	.....	211†	119,844	187	No. 17, dated 17th March 1887.
Nowgong	.....	Nowgong "	" "	223,223	349	.....	22,528‡	200,695	314	
Sibságar	.....	Sibságar "	" "	250,881	392	40	523†	250,398	391	
Lakhimpur	.....	Lakhimpur "	" "	1,328,640	2,076	.....	329†	1,328,311	2,075	
Cachar	.....	Cachar "	" "	45,006	70	.....	1,855†	43,151	67	
Sylhet	.....	Sylhet "	" "	57,591	90	8,000	57,591§	8,000	13	No. 18, dated 12th May 1886.
Gáro Hills	.....	Gáro Hills "	Beyond revenue limit	159,473	249	.....	12,320‡	147,153	230	No. 12, dated 24th February 1887.
Lakhimpur	.....	Lakhimpur "	" "	929,920	1,453	.....	.....	929,920	1,453	
Cachar	.....	Cachar "	" "	135,040	211	.....	.....	135,040	211	
Khási and Jaintia Hills.	.....	Khási and Jaintia Hills District.	" "	64,000	100	.....	.....	64,000	100	
Nága Hills	.....	Nága Hills District	" "	315,328	493	.....	.....	315,328	493	
			Total	4,090,513	6,392	8,075	178,028	3,920,560	6,126	

* Rectification of boundary. † Waste land grants. ‡ Declared reserved.
§ Of this 2,958 acres were land allotted for permanent cultivation and the remainder formed part of the protected forest gazetted during the year.

FORM No. 50.

FOREST DEPARTMENT, ASSAM.—PROSECUTION FOR BREACHES OF FOREST RULES DURING 1886-87.

Forest Division and Civil District.	Cases pending from 1885-86.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Gáro Hills division—														
Gáro Hills district	1	....	2	....	....	2	3	2	4	....	....	2	4	1
Goálpára division—														
Goálpára district	....	....	....	....	4	4	4	3	7	....	....	3	7	1
Kámrúp division—														
Kámrúp district	....	2	4	....	3	9	9	6	12	2	5	8	17	1
Darrang division—														
Darrang district	....	....	9	....	....	9	9	8	43	1	3	9	46	....
Nowgong division—														
Nowgong district	....	1	1	....	....	2	2	....	....	1	1	1	1	1
Sibságar division—														
Sibságar district	....	....	9	....	1	10	10	9	12	....	8	9	20	1
Lakhimpur division—														
Lakhimpur district	....	....	....	....	16	16	16	13	70	2	9	15	79	1
Cachar division—														
Cachar district	1	....	13	....	8	21	22	15	21	3	7	18	28	4
Sylhet division—														
Sylhet district	1	....	2	....	28	30	31	21	38	8	27	29	65	2
Khási and Jaintia Hills division—														
Khási and Jaintia Hills district.	....	1	6	....	3	10	10	8	18	1	1	9	19	1
Total	3	4	46	....	63	113	116	85	225	18	61	103	286	13

FORM No. 51.

FOREST DEPARTMENT, ASSAM.—AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1887.

Division.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1886.	During dry season of 1887.			Cost during the close of the year.
				Area attempted to be protected.	Failures.	Actually protected.	
	Goálpára district.						Rs.
Goálpára	Sidli	1876-77	31,839	43,757	45	43,712	2,575
	Guma	ditto	15,761	15,776	....	15,776	2,154
	Panbari-Pechadaveri	1875-76	3,250	3,290	140	3,150	133
	Bengtol-Darognou	1886-87	....	7,470	470	7,000	....
	Bhumeswar Hill	ditto	....	4,033	1,033	3,000	....
	Total	....	50,910	74,326	1,688	72,638	4,862
	Kámrúp district.						
Kámrúp	Bardwar Reserve	1873-74	14,200	14,400	....	14,400	655
	Pantan	....	10,961	11,000	....	11,000	382
	Kulsi	....	2,349	2,349	12	2,337	825
	Milmilia	1874-75	2,410	2,410	....	2,410	85
	Mayang Hill	1882-83	4,800	4,800	....	4,800	69
	Chhaygaon	1886-87	....	2,500	....	2,500	52
	Rani reserve .. Myang Block	1882-83	3,000	6,000	....	6,000	53
	Rani reserve .. Mairakanda Block	....	4,400	4,400	....	4,400	75
	Jara Sál	1873-74	820	820	....	820	129
	Kawasing	1882-83	3,260	3,260	....	3,260	204
	Matalkhar	1873-74	1,720	2,000	....	2,000	170
	Hajo	1884-85	60	100	100	....	....
	Simla Hill	1882-83	300	300	....	300	5
	Dumpara	....	450	450	....	450	8
	Khaksi Sikrabara	....	2,500	2,500	....	2,500	42
	Ghoraputa	....	100	100	....	100	2
	Khatkhati	....	400	640	....	640	11
	Tarcibari	....	640	640	....	640	11
	Garubaldha	....	200	200	....	200	3
	Khurkhuri	....	140	140	....	140	2
	Sursuria	....	970	900	....	900	15
	Jarikhuri	1885-86	1,200	....	....	....	....
	Bura Gohain	....	600	....	....	....	....
	Mugakhal	....	170	....	....	....	....
	Total	....	55,740	59,909	112	59,797	2,798
	Darrang district.						
Darrang	Balipara	1873-74	4,570	4,570	....	4,570	289
	Garumari	1874-75	180	180	....	180	33
	Charduar	1873-79	892	892	....	892	33
	Bamoni Hill	....	8	8	....	8	14
	Khalingduar	1883-84	12,892	12,892	....	12,892	7
	Total	....	18,542	18,542	....	18,542	376
	Nowgong district.						
Nowgong	Kholahát	1873-74	1,874	3,698	100	3,598	90
	Deboka	ditto	8,670	8,870	....	8,870	128
	Diju	1879-80	2,708	5,742	....	5,742	83
	Suang	1885-86	1,774	1,924	11	1,913	81
	Bamuni	....	384	499	....	499	40
	Total	....	15,410	20,733	111	20,622	422
	Khási and Jaintia Hills district.						
Khási and Jaintia Hills	Shillong	1874-75	3,618	3,618	160	3,458	771
	Blatkhwan	1881-82	960	960	....	960	257
	Total	....	4,578	4,578	160	4,418	1,028
	Grand Total	....	145,180	178,088	2,071	176,017	9,486

FORM No. 52.

FOREST DEPARTMENT, ASSAM.—AREA OF PLANTATIONS, 1886-87.

Division.	Name of Plantation	Area in acres. On 1st April 1886.	Added during the year.	Excluded during the year.	Area on 31st March 1887.	Receipts of the year.	Charges of the year.
Regular Plantations.	*Kulsi Plantations.*					Rs.	Rs.
Kámrúp	Caoutchouc	148	.....	.....	148	.....	396
	Teak	168	.....	.....	168	6	248
	Sisu	20	.....	.....	20	.....	74
	Bamboo	2	.....	.....	2	.....	1
	Add cost of nursery	.....	.....	.....	.....	.....	101
	Total	338	.....	.....	338	6	820
	Charduar Plantation.						
Darrang	Caoutchouc	1,043	.....	.....	1,043	.....	3,989
	Bamuni Hill Plantation.						
	Caoutchouc	8	.....	.....	8	.....	10
	Total	1,051	.....	.....	1,051	.....	3,999
	Total Regular Plantations	1,389	.....	.....	1,389	6	4,819
Cultural Operations.							
Gáro Hills	Cinchona nursery	.....	.....	.....	.....	.....	14
Sibságar	Nambor timber plantations	106	.....	.....	106	.....	424
Khási and Jaintia Hills.	Filling up of blanks	.....	.....	.....	.....	.....	131
	Total Cultural Operations	106	.....	.....	106	.....	569
	Grand Total	1,495	.....	.....	1,495	6	5,388

FORM No. 53.

FOREST DEPARTMENT, ASSAM.—TREES FELLED OR GIRDLED BY GOVERNMENT AGENCY DURING THE YEAR 1886-87.

(Selection Fellings.)

Division.	Trees felled or girdled. Description.	Number.
Gáro Hills	Sâl	221
	Sama	1
	Poma	5
Kámrúp	Sâl	4
	Teak poles	8
Darrang	Sâl	29
	Total	268
	Abstract of the Circle.	
	Sâl	254
	Teak poles	8
	Poma	5
	Sama	1
	Total	268

FORM No. 54.

FOREST DEPARTMENT, ASSAM.—OUTTURN OF TIMBER AND FIREWOOD DURING THE YEAR 1886-87.

Division.	Description of materials.	Outturn in cubic feet.								
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grant		Right-holders.
								Quantity.	Value.	
	A.—CLASSED STATE FOREST AND WASTE LANDS.								Rs.	
	(a)—*Reserved Forests.*									
Gáro Hills	Sâl-trees	870	.....	.....	870	.....	870	.....	.....	.....
	Bamboos ... ... (No.)	162	.....	.....	162	.....	162	.....	.....	.....
	Total	870	.....	.....	870	.....	870	.....	.....	.....
Goálpára	Sâl-trees	61,440	.....	.....	61,440	.....	61,440	.....	.....	.....
	First-class trees	13,710	.....	.....	13,710	.....	13,710	.....	.....	.....
	Second-class trees	1,320	.....	.....	1,320	.....	1,320	.....	.....	.....
	Dead wood	119,420	.....	.....	119,420	.....	119,420	.....	.....	.....
	Charcoal	468	.....	.....	468	.....	468	.....	.....	.....
	Total	196,358	.....	.....	196,358	.....	196,358	.....	.....	.....
Kámrúp	Sâl trees	82,358	.....	.....	82,358	200	82,158	.....	.....	.....
	First-class trees	3,269	.....	.....	3,269	.....	3,269	.....	.....	.....
	Second „	2,730	.....	.....	2,730	.....	1,690	1,040	56	.....
	Dead wood...	42,615	.....	.....	42,615	267	23,506	18,842	2,090	.....
	Sâl poles	382	.....	.....	382	75	307	.....	.....	.....
	Teak „	.....	.....	136	136	95	41	.....	.....	.....
	Firewood	222	.....	.....	222	.....	186	36	1	.....
	Charcoal	1,482	.....	.....	1,482	.....	1,167	315	4	.....
	Bamboos ... ... (No.)	69,704	.....	.....	69,704	5,204	.....	64,500	646	.....
	Total	133,058	.....	136	133,194	637	112,324	20,233	2,797	.....

Darrang	Sâl-trees	375	.....	.....	375	.....	375	.....	.....
	First-class trees	550	.....	.....	550	.....	550	.....	.....
	Second-class trees	6,875	.....	.....	6,875	.....	6,875	.....	.....
	Dead wood...	500	.....	.....	500	.....	500	.....	.....
	Poles	450	.....	.....	450	.....	450	.....	.....
	Bamboos ... ... (No.)	400	.....	.....	400	.....	400	.....	.....
	Total ...	8,750	.....	.....	8,750	.....	8,750	.....	.....
Nowgong	Sâl-trees	780	.....	.....	780	.....	780	.....	.....
	First-class trees	540	.....	.....	540	.....	540	.....	.....
	Second "	780	.....	.....	780	.....	780	.....	.....
	Dead wood...	900	.....	.....	900	.....	240	660	55
	Poles	1,164	.....	.....	1,164	.....	176	988	31
	Firewood	65,710	.....	.....	65,710	.....	100	65,610	1,640
	Bamboos ... ... (No.)	17,050	.....	.....	17,050	.....	.....	17,050	170
	Total ...	69,874	.....	.....	69.874	.....	2,616	67,258	1,896
Sibsâgar	First-class trees	3,600	.....	.....	3,600	.....	3,600	.....	.....
	Second "	9,420	.....	.....	9,420	.....	9,420	.....	.....
	Dead wood...	2,040	.....	.....	2,040	.....	2,040	.....	.....
	Poles	4,917	.....	.....	4,917	.....	4,917	.....	.....
	Nahor posts	528	.....	.....	528	.....	528	.....	.....
	Scantlings	189	.....	.....	189	.....	189	.....	.....
	Firewood	6,800	.....	.....	6,800	.....	6,800	.....	.....
	Charcoal	5,040	.....	.....	5,040	.....	5,040	.....	.....
	Bamboos (No.)	2,500	.....	.....	2,500	.....	2,500	.....	.....
	Total	32,534	.....	.....	32.534	.....	32,534	.....	.....
Cachar	First-class logs	23,009	.....	.....	23,009	.....	23,009	.....	.....
	Second "	18,242	.....	.....	18,242	.....	18,242	.....	.....
	Third "	262,047	.....	.....	262,047	.....	262,047	.....	.....
	Scantlings	85	.....	.....	85	.....	85	.....	.....
	Dugouts	600	.....	.....	600	.....	600	.....	.....
	Poles	1,132	.....	.....	1,132	.....	1,132	.....	.....
	Drift wood...	3,626	.....	.....	3,626	.....	3,626	.....	.....
	Firewood	5,112	.....	.....	5,112	.....	5,112	.....	.....
	Ditto drift	7,284	.....	.....	7,284	.....	7,284	.....	.....
	Bamboos (No.)	563,922	.....	.....	563,922	.....	563,922	.....	.....
	Ditto (drift) ... (No.)	20	.....	.....	20	.....	20	.....	.....
	Total ...	321,137	.....	.....	321,137	.....	321,137	.....	.....

FORM No. 54.—(*Continued.*)

Division.	Description of materials.	Outturn in cubic feet.								
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grant.		Right-holders.
								Quantity.	Value.	
									Rs.	
Sylhet	First-class logs	10,505	.....	.....	10,505	.....	10,505	.....	.....	.....
	Second „	1,892	.....	.....	1,892	.....	1,892	.....	.....	.....
	Third „	17,224	.....	.....	17,224	.....	17,224	.....	.....	.....
	Posts and planks	470	.....	.....	470	.....	470	.....	.....	.....
	Firewood	88	.....	.....	88	.....	88	.....	.....	.....
	Bamboos (No.)	291,500	.....	.....	291,500	.....	291,500	.....	.....	.....
	Total	30,179	.....	.....	30,179	.....	30,179	.....	.....	.....
	Total Reserved Forests	792,760	.....	136	792,896	637	704,768	87,491	4,693	.....
	(*b*). *Protected Forest.*									
Kámrúp	Sâl trees	266	.....	.....	266	.....	266	.....	.....	.....
	First-class trees	41	.....	.....	41	.....	41	.....	.....	.....
	Total	307	.....	.....	307	.....	307	.....	.....	.....
Sibságar	First-class trees	60	.....	.....	60	.....	60	.....	.....	.....
	Total	60	.....	.....	60	.....	60	.....	.....	.....
Lakhimpur	First-class trees	3,780	.....	.....	3,780	.....	3,780	.....	.....	.....
	Second-class trees	21,600	.....	.....	21,600	.....	21,600	.....	.....	.....
	Total	25,380	.....	.....	25,380	.....	25,380	.....	.....	.....

Cachar	Scantlings	1,306	.....	.....	1,306	.....	1,306	.....	.....	.....
	Dugouts	12,840	.....	.....	12,840	.....	12,840	.....	.....	.....
	Bamboos (No.)	950	.....	.....	950	.....	950	.....	.....	.....
	Total	14,146	.....	.....	14,146	.....	14,146	.....	.....	.....
Sylhet	First-class logs	2,360	.....	.....	2,360	.....	2,360	.....	.....	.....
	Second-class logs	1,351	.....	.....	1,351	.....	1,351	.....	.....	.....
	Third-class "	2,200	.....	.....	2,200	.....	2,200	.....	.....	.....
	Posts and planks	4,203	.....	.....	4,203	.....	43	4,160	260	.....
	Firewood	47,540	.....	.....	47,540	.....	140	47,400	4,444	.....
	Bamboos (No.)	562,620	.....	.....	562,620	.....	99,300	463,320	1,158	.....
	Total	57,654	.....	.....	57,654	.....	6,094	51,560	5,862	.....
	Total Protected Forests	97,547	.....	.....	97,547	.....	45,987	51,560	5,862	.....
	B.—Unclassed State Forests and Waste Lands.									
Gáro Hills	Sâl-trees	6,210	.....	.....	6,120	.....	5,880	330	150	.....
	First-class trees	7,200	.....	.....	7,200	.....	6,900	300	60	.....
	Second-class trees	8,370	.....	.....	8,370	.....	8,370	.....	.....	.....
	Sâl-logs	12,981	.....	.....	12,981	12,981	.....	.....	.....	.....
	" sleepers	9,732	.....	.....	9,732	9,732	.....	.....	.....	.....
	" beams	390	.....	.....	390	390	.....	.....	.....	.....
	" planks	222	.....	.....	222	222	.....	.....	.....	.....
	Dead wood	18,400	.....	.....	18,400	.....	18,400	.....	.....	.....
	Dugouts	64,590	.....	.....	64,590	.....	64,590	.....	.....	.....
	" (drift)	360	.....	.....	360	360	.....	.....	.....	.....
	Confiscated drift and waif wood	6,120	.....	.....	6,120	6,120	.....	.....	.....	.....
	" " firewood	8,200	.....	.....	8,200	8,200	.....	.....	.....	.....
	" " bamboos (raft)	1	.....	.....	1	.....	1	.....	.....	.....
	Total	142,775	.....	.....	142,775	38,005	104,140	630	210	.....
Goálpára	Sâl-trees	480	.....	.....	480	.....	480	.....	.....	.....
	First-class trees	1,650	.....	.....	1,650	.....	1,650	.....	.....	.....
	Second-class trees	23,310	.....	.....	23,310	.....	2,520	20,790	1,386	.....
	Dead wood	26,770	.....	.....	26,770	.....	1,680	25,090	627	.....
	Firewood	111,325	.....	.....	111,325	.....	25	111,300	3,339	.....
	Total	163,535	.....	.....	163,535	.....	6,355	157,180	5,352	.....

FORM No. 54.—(*Continued.*)

FOREST DEPARTMENT, ASSAM.—OUTTURN OF TIMBER AND FIREWOOD DURING THE YEAR 1886-87.

Division.	Description of materials.	Outturn in cubic feet.								
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government Agency.	Purchasers.	Free grant.		Right-holders.
								Quantity.	Value.	
									Rs.	
Kámrúp	Sâl-trees	35,106	.....	.....	35,106	.....	35,106	.....	.....	.....
	First-class trees	2,188	.....	.....	2,188	.....	2,188	.....	.....	.....
	Second-class trees	7,534	.....	.....	7,534	.....	4,374	3,160	158	.....
	Dead wood	2,752	.....	.....	2,752	.....	110	2,642	218	.....
	Firewood	1,080	.....	.....	1,080	.....	.....	1,080	10	.....
	Charcoal	612	.....	.....	612	.....	612	.....	.....	.....
	Bamboos (No.)	46,820	.....	.....	46,820	.....	.....	46,820	525	.....
	Total	49,272	.....	.....	49,272	.....	42,390	6,882	911	.....
Darrang	First-class trees	31,385	.....	.....	31,385	.....	7,275	24,110	4,822	.....
	Second-class trees	7,525	.....	.....	7,525	.....	7,525	.....	.....	.....
	Dead wood	225	.....	.....	225	.....	225	.....	.....	.....
	Poles	330	.....	.....	330	.....	330	.....	.....	.....
	Charcoal	180	.....	.....	180	.....	180	.....	.....	.....
	Bamboos (No.)	539	.....	.....	539	.....	539	.....	.....	.....
	Total	39,645	.....	.....	39,645	.....	15,535	24,110	4,822	.....
Nowgong	First-class trees	8,842	.....	.....	8,842	.....	8,842	.....	.....	.....
	Second-class trees	45,774	.....	.....	45,774	.....	12,799	32,975	2,638	.....
	Dead wood	13,065	.....	.....	13,065	.....	12,405	660	55	.....
	Poles	4,380	.....	.....	4,380	.....	200	4,180	131	.....
	Boats	1,664	.....	.....	1,664	.....	1,664	.....	.....	.....
	Firewood	57,080	.....	.....	57,080	.....	9,900	47,180	1,179	.....
	Bamboos (No.)	40,542	.....	.....	40,542	.....	4,482	36,060	361	.....
	Total	130,805	.....	.....	130,805	.....	45,810	84,995	4,364	.....

Sibságar	First-class trees	7,830	.....	.....	7,830	.....	7,830	.....	.....	.....
	Second-class trees	99,310	.....	.....	99,310	.....	9,270	90,040	9,004	.....
	Sál posts	676	.....	.....	676	.....	676	.....	.....	.....
	Nahor posts	1,053	.....	.....	1,053	.....	1,053	.....	.....	.....
	Dead wood	1,170	.....	.....	1,170	.....	1,170	.....	.....	.....
	Poles or saplings	3,231	.....	.....	3,231	.....	2,451	780	16	.....
	Boats or dugouts	4,720	.....	.....	4,720	.....	4,720	.....	.....	.....
	Drift	2,370	.....	.....	2,370	.....	2,370	.....	.....	.....
	Firewood	26,900	.....	.....	26,900	.....	22,100	4,800	48	.....
	Ditto (confiscated)	100	.....	.....	100	.....	100	.....	.....	.....
	Charcoal	10,656	.....	.....	10,656	.....	10,656	.....	.....	.....
	Bamboos (No.)	2,616	.....	.....	2,616	.....	1,425	1,191	21	.....
	Total	158,016	.....	.....	158,016	.....	62,396	95,620	9,089	.....
Lakhimpur	First-class trees	100,969	.....	.....	100,969	.....	17,869	83,100	16,620	.....
	Second „ „	88,530	.....	.....	88,530	.....	31,920	56,610	3,774	.....
	Poles or saplings	20	.....	.....	20	.....	20	.....	.....	.....
	Boats or dugouts	3,375	.....	.....	3,375	.....	3,375	.....	.....	.....
	Firewood	73,500	.....	.....	73,500	.....	73,500	.....	.....	.....
	Charcoal	2,745	.....	.....	2,745	.....	2,745	.....	.....	.....
	Bamboos (No.)	1,162	.....	.....	1,162	.....	140	1,022	20	.....
	Total	269,139	.....	.....	269,139	.....	129,429	139,710	20,414	.....
Cachar	First-class logs	9,419	.....	.....	9,419	.....	9,419	.....	.....	.....
	Second „ „	10,303	.....	.....	10,303	.....	10,303	.....	.....	.....
	Third „ „	47,065	.....	.....	47,065	.....	47,001	64	4	.....
	Scantlings	200	.....	.....	200	.....	119	81	10	.....
	Poles	7,348	.....	.....	7,348	.....	976	6,372	199	.....
	Drift wood	1,824	.....	.....	1,824	.....	1,824	.....	.....	.....
	Dugouts	4,260	.....	.....	4,260	.....	4,260	.....	.....	.....
	Firewood	14,058	.....	.....	14,058	.....	5,226	8,832	92	.....
	Ditto (drift)	3,562	.....	.....	3,562	.....	3,562	.....	.....	.....
	Bamboos (No.)	218,787	.....	.....	218,787	.....	133,837	84,950	212	.....
	Ditto (drift) (No.)	500	.....	.....	500	.....	500	.....	.....	.....
	Total	98,039	.....	.....	98,039	.....	82,690	15,349	517	.....
Sylhet	First-class logs	194	.....	.....	194	.....	194	.....	.....	.....
	Second „ „	455	.....	.....	455	.....	455	.....	.....	.....
	Third „ „	19,679	.....	.....	19,679	.....	19,679	.....	.....	.....

FORM No. 54.—(*Concluded.*)

FOREST DEPARTMENT, ASSAM.—OUTTURN OF TIMBER AND FIREWOOD DURING THE YEAR 1886-87.

Division.	Description of materials.	Outturn in cubic feet.								
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grant.		Right-holders.
								Quantity.	Value.	
	Posts and planks	691	.....	.....	691	.....	417	274	34	.....
	Firewood	9,132	.....	.....	9,132	.....	3,890	5,242	492	.....
	Bamboos (No.)	43,235	.....	.....	43,235	.....	13,485	29,750	74	.....
	Total	30,151	.....	.....	30,151	.....	24,635	5,516	600	.....
Khási and Jaintia Hills ...	First-class trees	120	.....	.....	120	.....	120	.....	.....	.....
	Second „ „	44,265	.....	.....	44,265	.....	44,265	.....	.....	.....
	Poles or saplings	.....	.....	1,252	1,252	.....	1,177	75	5	.....
	Confiscated firewood	.....	.....	36	36	.....	36	.....	.....	.....
	Total	44,385	.....	1,288	45,673	.....	45,598	75	5	.....
	Total Unclassed State Forests and Waste Lands.	1,125,762	.....	1,288	1,127,050	38,005	558,978	530,067	46,284	.....
	Grand Total	2,016,069	.....	1,424	2,017,493	38,642	1,309,733	669,118	56,839	.....
	Abstract of the Circle.									
	Sâl-trees	187,885	.....	.....	187,885	200	187,355	330	150	.....
	First-class trees	185,734	.....	.....	185,734	.....	78,224	107,510	21,502	.....
	Second „ „	367,343	.....	.....	367,343	.....	162,728	204,615	17,016	.....
	Sâl logs	12,981	.....	.....	12,981	12,981	.....	.....	.....	.....
	First-class logs	45,487	.....	.....	45,487	.....	45,487	.....	.....	.....
	Second „ „	32,243	.....	.....	32,243	.....	32,243	.....	.....	.....

Third „ „	348,215	.....	.....	348,215	.....	348,151	64	4	.....
Sâl posts	676	.....	.....	676	.....	676	.....	.....	.....
Nahor posts	1,581	.....	.....	1,581	.....	1,581	.....	.....	.....
Sâl sleepers	9,732	.....	.....	9,732	9,732	.....	.....	.....	.....
„ beams	390	.....	.....	390	390	.....	.....	.....	.....
„ planks	222	.....	.....	222	222	.....	.....	.....	.....
Miscellaneous converted timber	7,144	.....	.....	7,144	.....	2,629	4,515	304	.....
Sâl poles	382	.....	.....	382	75	307	.....	.....	.....
Teak „	.....	.....	136	136	95	41	.....	.....	.....
Miscellaneous poles or saplings	22,972	.....	1,252	24,224	.....	11,829	12,395	382	.....
Boats or dugouts	92,049	.....	.....	92,049	.....	92,049	.....	.....	.....
Dead wood	227,857	.....	.....	227,857	267	179,696	47,894	3,045	.....
Confiscated and drift wood	13,940	.....	.....	13,940	6,120	7,820	.....	.....	.....
Ditto boats or dugouts	360	.....	.....	360	360	.....	.....	.....	.....
Ditto firewood	19,146	.....	36	19,182	8,200	10,982	.....	.....	.....
Charcoal	21,183	.....	.....	21,183	.....	20,868	315	4	.....
Firewood	418,547	.....	.....	418,547	.....	127,067	291,480	11,245	.....
Bamboos (No.)	1,862,509	.....	.....	1,862,509	5,204	1,112,642	744,663	3,187	.....
„ drift (No.)	520	.....	.....	520	.....	520	.....	.....	.....
„ „ (raft)	1	.....	.....	1	.....	1	.....	.....	.....
Total	2,016,069	.....	1,424	2,017,493	38,642	309,733	669,118	56,839	.....

FORM No. 55.

FOREST DEPARTMENT, ASSAM.—OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1886-87.

Division.	Description of produce.	Produce removed or utilized.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	A—CLASSED STATE FORESTS AND WASTE LANDS.		Rs.		Rs.		Rs.		Rs.		Rs.
	(a) *Reserved Forests.*										
Gáro Hills	Garkati produce, Gáro passes.....	.....	.....	20	7	.....	.....	.....	.....	20	7
	Total	.....	.....	20	7	.....	.....	.....	.....	20	7
Goálpára.....	Cane (bundles)	.....	.....	2,550	19	.....	.....	.....	.....	2,550	19
	Total	.....	.....	2,550	19	.....	.....	.....	.....	2,550	19
Kámrúp	Canes (bundles)	7,241	54	.....	.....	240	2	.....	.....	7,481	56
	Rent of trees for rearing silkworms.	.....	.....	263	18	.....	.....	.....	.....	263	18
	Betel-creepers	.....	.....	6	1	.....	.....	.....	.....	6	1
	Rent of trees for rearing lac	.....	.....	8	4	.....	.....	.....	.....	8	4
	Thatching-grass (bundles)	.....	.....	.....	.....	3,500	14	.....	.....	3,500	14
	Ikras (bundles)	.....	.....	.....	.....	260	6	.....	.....	260	6
	Total	7,241	54	277	23	4,000	22	.....	.....	11,518	99
Darrang	India-rubber (mds.).....	4	341	.....	.....	.....	.....	.....	.....	4	341
	Cane (bundles)	.....	.....	19,550	147	.....	.....	.....	.....	19,550	147
	Total	4	341	19,550	147	.....	.....	.....	.....	19,554	488
Nowgong	Cane (bundles)	.....	.....	.....	.....	33	.....	.....	.....	33	.....
	Thatching-grass	.....	.....	.....	.....	6,250	16	.....	.....	6,250	16
	Total	.....	.....	.....	.....	6,283	16	.....	.....	6,283	16

Sibságar ...	Cane (bundles)	5,100	38	5,100	38	.....	.....	.....	.....	10,200	76
	Bill grass	.....	.....	.....	80	.....	.....	.....	.....	.....	80
	Thatching-grass	.....	.....	1,000	4	.....	.....	.....	.....	1,000	4
	Total	5,100	38	6,100	122	.....	.....	.....	.....	11,200	160
Cachar ...	Cane (bundles)	.....	.....	21,253	1,328	.....	.....	.....	.....	21,253	1,328
	Total	.....	.....	21,253	1,328	.....	.....	.....	.....	21,253	1,328
Sylhet ...	Agar (baskets)	.....	.....	175	263	.....	.....	.....	.....	175	263
	Canes	.....	.....	4,572	286	.....	.....	.....	.....	4,572	286
	Sun-grass	.....	.....	184,009	446	.....	.....	.....	.....	184,009	446
	Rubber-mahál	.....	.....	.....	250	.....	.....	.....	.....	.....	250
	Agar ,,	.....	.....	.....	320	.....	.....	.....	.....	.....	320
	Total	.....	.....	188,756	1,565	.....	.....	.....	.....	188,756	1,565
	Total of Classed State Forests and Waste Lands.	12,345	433	238,506	3,211	10,283	38	.....	.....	261,134	3,682
	(*b*).—*Protected Forests.*										
Sylhet ...	Agar	.....	.....	55	402	.....	.....	.....	.....	55	402
	Canes	.....	.....	2,043	128	10,360	648	.....	.....	12,403	776
	Sun-grass	.....	.....	111,846	279	57,700	119	.....	.....	169,546	398
	Ekra	.....	.....	.....	.....	24,250	758	.....	.....	24,250	758
	Pati	.....	.....	.....	.....	7,170	4	.....	.....	7,170	4
	Total	.....	.....	113,944	809	99,480	1,529	.....	.....	213,424	2,338
	Total of Protected Forests	.....	.....	113,944	809	99,480	1,529	.....	.....	213,424	2,338
	B.—Unclassed State Forests and Waste Lands. *Garkati Produce.*										
Gáro Hills ...	Foreign passes	.....	.....	3,380	6,759	.....	.....	50	100	3,430	6,859
	Gáro passes	.....	.....	2,278	855	.....	.....	.....	.....	2,278	855
	India-rubber (mds.)	.....	25	.....	.....	.....	.....	.....	.....	.....	25
	Grazing	.....	.....	.....	320	.....	.....	.....	.....	.....	320
	Total	.....	25	5,658	7,934	.....	.....	50	100	5,708	8,059

FORM No. 55.—(*Continued.*)

Division.	Description of produce.	Produce removed or utilized.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs		Rs		Rs		Rs		Rs
Goálpára ...	Cane	.....	.....	8,250	62	.....	.....	.....	.....	8,250	62
	Fruits	.....	.....	.....	9	.....	.....	.....	.....	.....	9
	Total ...	.....	.....	8,250	71	.....	.....	.....	.....	8,250	71
Kámrúp ...	Rent of silk-worm trees ...	.....	.....	46	12	.....	.....	.....	.....	46	12
	Cane (bundles)	.....	.....	9,220	69	.....	.....	.....	.....	9,220	69
	Total ...	.....	.....	9,266	81	.....	.....	.....	.....	9,266	81
Darrang ...	Cane (bundles)	.....	.....	1,108	8	9,651	69	.....	.....	10,759	77
	Rubber (mds.)	.....	.....	3	215	.....	.....	.....	.....	3	215
	„ mahál	.....	.....	.....	22,100	.....	.....	.....	.....	.....	22,100
	Total ...	.....	.....	1,111	22,323	9,651	69	.....	.....	10,762	22,392
Nowgong ...	Cane	.....	.....	43,260	323	9,800	74	.....	.....	53,060	397
	Lac-mahál	.....	.....	.....	199	.....	.....	.....	.....	.....	199
	Rubber-mahál	.....	.....	.....	88	.....	.....	.....	.....	.....	88
	Total ...	.....	.....	43,260	610	9,800	74	.....	.....	53,060	684
Sibságar ...	Cane (bundles)	.....	.....	55,700	418	1,400	11	.....	.....	57,100	429
	Total ...	.....	.....	55,700	418	1,400	11	.....	.....	57,100	429

Lakhimpur ...	Rubber-mahál	.....	.....	.....	11,650	.....	.....	.....	.....	.....	11,650
	Rubber (mds.)	.....	.....	1	17	.....	.....	.....	.....	1	17
	Lac-mahál	.....	.....	.....	13	.....	.....	.....	.....	.....	13
	Canes	.....	.....	342,000	2,340	2,500	19	.....	.....	344,500	2,359
	Cane-mahál	.....	.....	.....	1,000	.....	.....	.....	.....	.....	1,000
	Total	.....	.....	342,001	15,020	2,500	19	.....	.....	344,501	15,039
Cachar.....	Cane (bundles)	.....	.....	2,584	162	596	37	.....	.....	3,180	199
	Agar (baskets)	.....	.....	119	179	.....	.....	.....	.....	119	179
	Sun-grass and reeds	.....	.....	5,425	14	140	4	.....	.....	5,565	18
	Rubber-mahál	.....	.....	.....	500	.....	.....	.....	.....	.....	500
	Total	.....	.....	8,128	855	736	41	.....	.....	8,864	896
Sylhet	Cane (bundles)	.....	.....	199	12	650	41	.....	.....	849	53
	Sun-grass	.....	.....	5,680	23	6,700	17	.....	.....	12,380	40
	Pati	.....	.....	.....	.....	4,610	3	.....	.....	4,610	3
	Sun-grass-mahál	.....	.....	.....	1,009	.....	.....	.....	.....	.....	1,009
	Total	.....	.....	5,879	1,044	11,960	61	.....	.....	17,839	1,105
Khási and Jaintia Hills.	Rubber mahál	.....	.....	.....	350	.....	.....	.....	.....	.....	350
	Jackfruit-mahál	.....	.....	.....	39	.....	.....	.....	.....	.....	39
	Fruits (apple)	.....	.....	.....	10	.....	.....	.....	.....	.....	10
	Thatching-grass (bundles)	.....	.....	1,032	97	.....	.....	.....	.....	1,032	97
	Total	.....	.....	1,032	496	.....	.....	.....	.....	1,032	496
	Total of Unclassed State Forests and Waste Lands.	.....	25	480,285	48,852	36,047	275	50	100	516,382	49,252
	Grand Total	12,345	458	832,735	52,872	145,810	1 842	50	100	990,940	55,272
	Abstract of the Circle.										
	Gáro Passes (No.)	.....	.....	2,298	862	.....	.....	.....	.....	2,298	862
	Foreign " "	.....	.....	3,380	6,759	.....	.....	50	100	3,430	6,859
	Cane (bundles)	12,341	92	517,389	5,340	35,230	901	.....	.....	564,960	6,333
	Trees for rearing silkworms	.....	.....	309	30	.....	.....	.....	.....	309	30
	Betel-creepers	.....	.....	6	1	.....	.....	.....	.....	6	
	Trees for rearing lac	.....	.....	8	4	.....	.....	.....	.....	8	
	Thatching-grass (bundles)	.....	.....	308,992	863	7'29,0	170	.....	.....	383,282	1,033

FORM No. 55.—(*Concluded.*)

Division.	Description of produce.	Produce removed or utilized.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.		Rs.		Rs.
	India-rubber	4	366	4	232	.....	.....	.....	.....	8	598
	Bill grass	.....	.....	.....	80	.....	.....	.....	.....	.....	80
	Sun-grass-mahál	.....	.....	.....	1,009	.....	.....	.....	.....	.....	1,009
	Agar (baskets)	.....	.....	349	844	.....	.....	.....	.....	349	844
	Agar-mahál	.....	.....	.....	320	.....	.....	.....	.....	.....	320
	Cane-mahál	.....	.....	.....	1,000	.....	.....	.....	.....	.....	1,000
	Lac-mahál	.....	.....	.....	212	.....	.....	.....	.....	.....	212
	Rubber-mahál	.....	.....	.....	34,938	.....	.....	.....	.....	.....	34,938
	Reeds	.....	.....	.....	.....	24,510	764	.....	.....	24,510	764
	Fruits	.....	.....	.....	58	.....	.....	.....	.....	.....	58
	Pati	.....	.....	.....	.....	11,780	7	.....	.....	11,780	7
	Grazing	.....	.....	.....	320	.....	.....	.....	.....	.....	320
	Total	12,345	458	832,735	52,872	145,810	1,842	50	100	990,940	55,272

FORM No. 56.

FOREST DEPARTMENT, ASSAM.— ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1886-87.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
BALANCE AT COMMENCEMENT OF THE YEAR.				
GARO HILLS DIVISION.				
India-rubber ..... Mds.	0-20-0	.....		
Beams of Sâl timber	1	3		
Planks " "	58	41	59	44
Received from the Forests in Depôts.				
Logs of Sâl timber	2,227	21,848		
Confiscated first-class trees	5	.....		
" miscellaneous dugouts	11	.....		
India-rubber ..... Mds.	0-18-0	.....	2,243	21,848
Received from the Forests and sold locally.				
Teak poles	8	41		
Drift and confiscated Sâl-trees	100	.....		
" " " dugouts ...	9	.....		
" " 1st-class trees ...	200	.....		
" " " dugouts ...	3	.....		
" " " posts	15	.....		
" " 2nd-class trees ...	352	.....		
" " " dugouts ...	4	.....		
" " miscellaneous trees	72	.....		
" " " dugouts ...	5	.....		
" " " posts	240	.....		
" " " planks	6	.....		
" " " plough piece	1	.....		
" " firewood	.....	300		
" " charcoal	.....	8		
" " bamboos	2,000	.....	1,015	349
Received by conversion in Depôts.				
Sleepers of Sâl timber	7,398	9,732		
Beams of ditto	120	809		
Planks of ditto	290	222	7,808	10,763
Total	.....	.....	11,125	33,004

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Removed by purchases from Depôts.				
Planks of Sâl timber	5	.....		
Confiscated first-class logs	5	.....		
" miscellaneous dugouts	11	.....	21	
India-rubber ..... Mds.	0-38-0	.....		
Sold locally.				
Teak poles	8	41		
Drift and confiscated Sâl logs	100	.....		
" " " dugouts	9	.....		
" " 1st-class trees	200	.....		
" " " dugouts	3	.....		
" " " posts	15	.....		
" " 2nd-class trees	352	.....		
" " " dugouts	4	.....		
" " miscellaneous trees.	72	.....		
" " " dugouts	5	.....		
" " " posts	240	.....		
" " " planks	6	.....		
" " " plough piece.	1	.....		
" " firewood	.....	300		
" " charcoal	.....	8		
" " bamboos	2,000	.....	1,015	349
Converted in Depôts.				
Logs of Sâl timber	1,370	10,763	1,370	10,763
Used by the Department.				
Beams of Sâl timber	2	7		
Planks of ditto	331	259	333	266
BALANCE AT FOREST DEPÔTS AT CLOSE OF THE YEAR.				
GARO HILLS DIVISION.				
Logs of Sâl timber	857	11,085		
Beams of ditto	119	805		
Sleepers of ditto	7,398	9,732		
Planks of ditto	12	4	8,386	21,626
Total	.....	.....	11,125	33,004

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1886-87.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
	Number.	C. feet.	Value.	Number.	C. feet.	Value.	In favour of the year.	Against the year.
GARO HILLS DIVISION.			Rs.			Rs.	Rs.	Rs.
India-rubber (seers).	20	.....	25	.....	.....	.....	.....	25
Sâl beams ...	1	3	8	119	805	1,207	1,199	.....
„ planks ...	58	41	102	12	4	6	.....	96
„ logs ...	.....	.....	.....	857	11,085	8,570	8,570	.....
„ sleepers ...	.....	.....	.....	7,398	9,732	12,946	12,946	.....
Total ...	.....	.....	135	.....	.....	22,729	22,715	121

Net difference in favour of the year Rs. 22,594.

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1886-87.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
DIRECTION.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments	12	250	12	250	.....	.....
Tools	21	33	21	33	.....	.....
Office and rest-house furniture	64	1,235	69	1,369	134	.....
Tents	1	185	1	185	.....	.....
Miscellaneous	.....	367	.....	428	61	.....
Buildings.						
Out-houses	6	220	5	140	.....	80
Live Stock.						
Elephants.....	2	3,900	2	3,800	.....	100
Total.....	.....	6,190	.....	6,205	195	180
WORKING PLANS DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	.....	.....	794	2,756	2,756	.....
Tools	.....	.....	322	265	265	.....
Office furniture	.....	.....	4	68	68	.....
Tents	.....	.....	.....	.....	.....	.....
Miscellaneous	.....	.....	.....	217	217	.....
Total	.....	.....	.....	3,306	3,306	.....

FORM No. 57.—(*Continued.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
GARO HILLS DIVISION.						
Stores, Tools and Plant.		Rs.		Rs.	Rs.	Rs.
Surveying and other instruments	121	669	130	415	.....	254
Tools	321	423	575	866	443	.....
Office and rest-house furniture	23	973	45	1,251	278	.....
Miscellaneous	.....	1,071	.....	574	.....	497
Buildings.						
Tura bungalow	1	5,437	1	5,437	.....	.....
Tura godown	1	1,381	1	1,381	.....	.....
Damra inspection bungalow	1	512	1	512	.....	.....
Live Stock.						
Elephants	2	3,800	1	1,900	.....	1,900
Total	.....	14,266	.....	12,336	721	2,651
GOÁLPÁRA DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	28	253	26	244	.....	9
Tools	458	669	338	474	.....	195
Office and rest-house furniture	62	1,018	58	918	.....	100
Tents	1	100	1	100	.....	.....
Miscellaneous	.....	942	.....	729	.....	213
Buildings.						
Dhubri bungalow	1	8,000	1	8,000	.....	.....
Other houses	27	1,082	27	885	.....	197
Live Stock.						
Elephants	2	3,800	2	3,700	.....	100
Total	.....	15,864	.....	15,050	.....	814
KÁMRÚP DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	42	155	42	145	.....	10
Tools	401	614	383	752	138	.....
Office and rest-house furniture	69	1,028	72	1,012	.....	16
Tents	1	30	1	20	.....	10
Miscellaneous	.....	1,709	.....	1,719	10	.....
Buildings.						
Kulsi plantation bungalow	1	3,200	1	3,000	.....	200
Gauháti bungalow	1	5,658	1	5,658	.....	.....
Other houses	81	1,088	73	1,187	99	.....
Live Stock.						
Elephants	4	5,100	3	3,300	.....	1,800
Bullocks	2	130	2	120	.....	10
Total	.....	18,712	.....	16,913	247	2,046

FORM No. 57.—(*Continued.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Against the year.
Darrang Division.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments	16	235	24	273	38	.....
Tools	433	450	480	577	127	.....
Office and rest-house furniture	73	675	76	781	106	.....
Tents	2	108	2	108	.....	.....
Miscellaneous	.....	500	.....	450	.....	50
Buildings.						
Bhairabighat bungalow and inspection houses.	3	3,800	3	3,800	.....	.....
Other houses	16	400	16	400	.....	.....
Live Stock.						
Elephants	2	2,800	2	2,800	.....	.....
Total	.....	8,968	.....	9,189	271	50
Nowgong Division.						
Stores, Tools and Plant.						
Surveying and other instruments	15	124	17	129	5	.....
Tools	40	102	111	222	120	.....
Office and rest-house furniture	25	505	33	665	160	.....
Tents	.....	.....	.....	.....	.....	.....
Miscellaneous	.....	170	.....	226	56	.....
Buildings.						
Inspection houses	2	180	2	160	.....	20
Other houses	8	241	8	200	.....	41
Live Stock.						
Elephant	1	1,000	1	1,100	100	.....
Total	.....	2,322	.....	2,702	441	61
Sibsagar Division.						
Stores, Tools and Plant.						
Surveying and other instruments	24	59	27	59	.....	.....
Tools	480	695	268	427	.....	268
Office and rest-house furniture	44	566	46	650	84	.....
Tents	2	15	.....	.....	.....	15
Miscellaneous	.....	690	.....	450	.....	240
Buildings.						
Sibságar bungalow	1	5,000	1	5,000	.....	.....
Golághát bungalow and inspection houses	5	4,800	3	4,000	.....	800
Other houses	15	400	8	300	.....	100
Live-stock.						
Elephants	3	3,800	2	2,800	.....	1,000
Bullocks	2	120	.....	.....	.....	120
Total	.....	16,145	.....	13,686	84	2,543

FORM No. 57.—(*Concluded.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number or quantity.	Value.	Number or quantity.	Value.	In favour of the year.	Aganst the year
		Rs.		Rs.	Rs.	Rs.
LAKHIMPUR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	46	599	45	500	.....	99
Tools	187	393	187	500	107	.....
Office and rest-house furniture ...	60	736	76	1,072	336	.....
Tents	1	226	2	306	80	.....
Miscellaneous	.....	668	.....	1,150	482	.....
Buildings.						
Lakhimpur bungalow	1	8,510	1	8,510	.....	.....
Other houses	25	1,886	25	1,886	.....	.....
Live-stock.						
Elephants	2	3,000	3	4,000	1,000	.....
Total ...	.....	16,018	.....	17,924	2,005	99
CACHAR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	14	376	13	316	.....	60
Tools	269	562	288	587	25	.....
Office and rest-house furniture ...	102	1,205	103	1,185	.....	20
Tents	1	50	1	40	.....	10
Miscellaneous	.....	686	.....	318	.....	368
Buildings.						
Divisional and office bungalows, revenue stations and inspection houses ...	8	9,575	8	9,275	.....	300
Other houses	42	1,611	40	1,396	.....	215
Live-stock.						
Elephant	1	600	1	600	.....	.....
Total ...	.....	14,665	.....	13,717	25	973
SYLHET DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	40	153	40	153	.....	.....
Tools	7	30	17	69	39	.....
Office and rest-house furniture ...	26	367	35	634	267	.....
Tents	.....	.....	.....	.....	.....	.....
Miscellaneous	.....	58	.....	146	88	.....
Buildings.						
Office and rest-houses ...	3	170	4	517	347	.....
Other houses	12	245	14	260	15	.....
Live-stock.						
Elephants	.....	.....	.....	.....	.....	.....
Total ...	.....	1,023	.....	1,779	756	.....
KHÁSI AND JAINTIA HILLS DIVISION.						
Stores, Tools and Plant.						
Tools	69	76	21	20	.....	56
Miscellaneous	.....	16	.....	120	104	.....
Buildings.						
Small houses	4	330	4	330	.....	.....
Total ...	.....	422	.....	470	104	56
Grand Total ...	.....	1,14,595	.....	1,13,277	8,155	9,473

Net difference against the year, Rs. 1,318.

FORM No. 58.

Forest Department, Assam.—Summary of Revenue and Expenditure of the different Divisions, 1886-87.

Budget heads.	Direction.	Working Plans Division.	Gáro Hills Division.	Goálpára Division.	Kámrup Division.	Darrang Division.	Nowgong Division.	Sibságar Division.	Lakhimpur Division.	Cachar Division.	Sylhet Division.	Khasi and Jaintia Hills Division.	Nága Hills Division.	Total.
REVENUE.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.		Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency—														
a. Timber	.....	.....	3 0 0	.....	13 8 0	.....	.....	.....	.....	.....	.....	.....	.....	16 8 0
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	28 12 0	.....	.....	340 13 9	.....	.....	.....	.....	.....	.....	.....	369 9 9
II.—Timber and other produce removed from the forests by consumers or purchasers—	.....	.....	7,642 6 6	.....	.....	.....	.....	.....	.....	.....	697 12 0	.....	.....	8,340 2 6
a. Timber	.....	.....	6,673 4 3	17,051 15 0	26,967 0 0	6,058 6 11	4,112 2 0	6,273 14 1	9,766 4 2	34,633 5 6	9,723 12 9	3,053 8 0	.....	1,24,343 8 8
b. Firewood and charcoal	.....	.....	.....	15 4 0	63 11 0	1 2 0	236 6 0	472 0 0	773 2 0	88 7 6	385 15 6	.....	.....	2,037 3 0
c. Bamboos	.....	.....	1 13 0	.....	.....	21 1 3	92 10 10	51 8 0	443 13 9	1,759 7 9	1,010 11 6	.....	.....	3,381 2 1
d. Grazing and fodder grass	.....	.....	320 0 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	320 0 0
e. Other minor produce	.....	.....	.....	243 1 0	103 14 6	22,470 3 9	557 1 0	625 12 0	15,619 9 0	2,063 5 0	2,459 3 0	495 15 3	.....	44,838 0 6
III.—Confiscated drift and waif wood	.....	.....	866 15 6	28 8 0	590 7 0	61 0 6	23 4 0	336 15 0	.....	317 8 6	.....	0 9 0	.....	2,225 3 6
IV.—Revenue from forests not managed by Government—														
a. Duty on foreign timber and other forest produce	.....	.....	.....	113 0 0	.....	.....	.....	.....	.....	1,403 10 3	.....	.....	.....	1,516 10 3
b. Revenue from shared and private forests	.....	.....	712 5 11	.....	7,875 3 0	.....	.....	.....	.....	.....	.....	1,024 5 6	.....	9,111 14 5
V.—Miscellaneous—														
a. Fines and forfeitures	.....	.....	23 0 0	241 0 0	388 12 0	10 0 0	.....	127 12 0	5 0 0	.....	.....	.....	.....	795 8 0
b. Refunds	51 14 10	.....	70 15 5	2 9 0	34 4 0	.....	.....	1 8 0	0 11 1	.....	.....	.....	.....	141 14 4
c. Other sources	0 14 0	.....	413 0 0	752 11 0	1,423 10 3	257 0 0	487 0 0	898 8 0	654 2 0	4,163 5 0	5,554 10 8	188 11 3	.....	14,773 7 9
Total Receipts	52 12 10	*Nil.*	16,755 8 7	18,449 0 0	36,960 8 3	29,249 12 2	5,508 7 10	8,787 13 1	27,262 10 0	44,429 1 6	19,812 1 0	4,763 1 0	.....	2,12,010 12 9
EXPENDITURE.														
A.—Conservancy and Works.														
I.—Timber and other produce removed from the forests by Government agency—														
a. Timber	.....	.....	2,348 5 0	.....	.....	.....	.....	209 11 0	.....	.....	.....	.....	.....	2,558 0 0
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	12 0 0	.....	.....	.....	.....	.....	12 0 0
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	9 0 0	.....	0 12 0	106 8 0	.....	.....	.....	.....	.....	.....	.....	116 4 0
II.—Timber and other produce removed from the forests by consumers or purchasers.	.....	.....	1,218 1 10	42 4 3	514 9 9	131 10 9	287 9 4	78 14 0	2,968 2 6	348 4 8	494 4 3	.....	.....	6,103 13 4
III.—Confiscated, drift and waif wood	.....	.....	5 0 0	.....	9 12 0	.....	0 2 0	58 6 0	.....	6 2 0	.....	.....	.....	79 6 0
IV.—Revenue from forests not managed by Government—														
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—Rent of leased forests, and payments to share-holders in forests managed by Government.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VI.—Live stock, stores, tools and plant—														
a. Purchase of cattle	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Feed and keep of cattle	503 4 3	.....	1,040 12 6	737 12 4	1,576 8 11	802 8 6	325 2 9	1,042 2 0	770 2 5	382 11 6	.....	.....	.....	7,137 1 2
c. Stores, tools and plant	186 13 3	2,296 10 3	1,215 8 0	50 6 0	93 15 7	449 14 12	364 9 6	213 3 9	336 8 0	136 14 0	458 10 6	.....	.....	5,803 0 11

VII.—Communications and buildings—															
a. Roads and bridges	.....	.....	1,336 11 8	.....	1,035 9 7	476 2 [illegible]	.....	200 11 0	32 10 0	404 10 0	14 14 0	.....	.....	3,501 4 3
b. Buildings	.....	.....	1,180 8 6	646 15 0	2,610 7 7	296 2 9	189 12 9	555 1 0	373 12 3	1,788 1 7	368 15 0	66 1 0	.....	8,075 14 5
c. Other works	.....	.....	.....	.....	31 0 6	18 2 0	.....	.....	.....	154 2 0	.....	.....	.....	203 4 6
VIII.—Demarcation, improvement, and extension of forests—															
a. Demarcation	.....	.....	839 6 6	162 2 5	403 4 5	297 2 [illegible]	308 0 6	612 8 0	2,545 11 5	606 4 0	1 4 0	45 4 0	.....	5,821 1 0
b. Compensation for land and rights	.....	.....	500 0 0	950 0 0	.....	.....	.....	.....	.....	1 12 6	.....	.....	.....	1,451 12 6
c. Surveys and working plans	400 4 0	8,073 3 2	.....	66 0 0	0 8 0	.....	40 0 0	32 8 0	1 15 0	1 0 0	.....	.....	.....	8,620 6 2
d. Plantations	.....	.....	12 8 0	.....	820 6 3	3,999 7 0	.....	423 8 6	.....	.....	.....	131 4 0	.....	5,883 1 9
e. Protection from fire	.....	.....	.....	4,345 5 1	2,880 4 3	402 15 9	379 7 3	.....	1 0 0	.....	.....	1,046 12 3	.....	9,065 12 7
f. Other Works	903 8 2	.....	83 12 0	1,046 7 10	1,409 8 6	90 13 6	639 8 7	1,588 2 0	1,068 7 4	720 14 1	2,202 12 11	239 11 6	.....	9,953 10 5
IX.—Miscellaneous—															
a. Refunds	.....	.....	1,119 9 0	.....	30 0 0	0 14 8	.....	.....	.....	1 0 8	.....	.....	.....	1,151 8 4
b. Law charges	.....	.....	.....	57 4 0	.....	.....	.....	100 0 0	291 11 6	120 0 0	27 8 0	.....	.....	596 7 6
c. Other charges	288 7 6	169 7 3	697 3 4	540 15 0	664 7 1	82 5 9	51 10 6	228 13 0	153 8 9	316 8 9	353 10 8	1 0 0	.....	3,539 1 2
Total A—Conservancy and Works	2,282 5 2	10,535 4 8	11,613 6 4	8,645 7 11	12,081 2 5	7,154 12 6	2,586 0 2	5,325 8 3	8,553 9 2	4,938 5 9	3,921 14 11	1,530 0 9	Nil.	79,167 14 0
B.—ESTABLISHMENT.															
I.—Salaries—															
a. Conservators	15,000 0 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000 0 0
b. Superior officers	.....	645 2 7	6,115 14 1	5,796 10 8	7,800 0 0	9,600 0 0	1,800 0 0	5,796 10 8	6,462 12 8	3,376 10 8	1,800 0 0	.....	.....	49,193 13 4
c. Subordinate forests and depôt establishments	.....	400 0 0	3,659 13 1	3,383 8 3	3,988 14 3	2,659 14 8	1,414 12 6	3,543 3 7	2,965 12 6	3,895 10 10	270 0 0	1,443 5 4	.....	27,694 15 0
d. Office establishments	4,829 6 5	179 15 0	965 10 2	1,008 0 0	989 0 0	564 0 0	429 0 0	980 0 0	1,028 3 6	1,000 1 0	440 0 0	.....	.....	12,423 4 1
e. Deputation and special allowances	.....	.....	1,757 0 2	.....	.....	.....	124 15 1	.....	.....	.....	.....	.....	.....	1,881 15 4
.—Travelling allowances—															
a. Conservators	2,813 1 10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,813 1 10
b. Superior officers	.....	383 1 0	2,530 11 1	1,469 3 6	1,355 3 0	2,467 10 9	1,072 6 0	1,951 10 7	2,103 15 4	1,126 0 0	522 13 0	.....	.....	14,892 15 3
c. Subordinate forest and depôt establishments	.....	260 14 0	575 3 0	430 12 0	697 8 0	478 9 0	244 6 0	877 8 0	696 1 0	539 7 0	156 5 6	.....	.....	4,356 9 6
d. Office establishments	57 10 6	.....	13 13 0	.....	.....	.....	9 4 0	23 4 0	16 14 0	8 0 0	6 1 0	.....	.....	134 14 6
III.—Contingencies—															
a. Stationery	7 6 0	.....	3 2 9	.....	0 10 0	.....	.....	3 7 6	1 4 0	11 4 0	0 10 0	.....	.....	27 12 3
b. Carriage of tents and records	17 0 0	.....	30 8 0	25 4 6	.....	.....	6 12 0	.....	.....	1 6 0	.....	.....	.....	80 14 6
c. Rents, rates, and taxes	360 0 0	.....	.....	24 0 0	56 4 0	.....	30 0 0	50 0 0	27 0 0	99 12 0	.....	.....	.....	697 0 0
d. Pay of police guards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Official postage	357 6 6	28 8 0	209 7 6	42 6 0	153 2 0	132 1 3	70 13 6	136 9 0	168 2 0	174 5 6	143 11 0	.....	.....	1,616 9 3
f. Sundries	296 14 6	112 6 3	506 9 6	296 8 6	110 8 0	62 6 0	40 4 3	67 5 6	99 12 11	189 13 0	87 15 0	5 5 6	.....	1,875 11 11
Total B.—Establishments	23,738 13 9	2,009 14 10	16,367 11 5	12,416 5 5	15,041 6 3	15,954 9 8	5,292 9 4	13,429 10 10	13,569 14 11	10,422 6 0	3,427 7 6	1,443 10 10	Nil.	1,33,119 8 9
Grand Total of Expenditure	26,021 2 11	12,545 3 6	27,981 1 9	21,061 13 4	27,122 8 8	23,109 6 2	7,878 9 6	18,755 3 1	22,123 8 1	15,360 11 9	7,349 6 5	2,978 11 7	Nil.	2,12,287 6 9

CALCUTTA :

The 2nd June 1887.

JAMES TAYLOR,

Assistant-Comptroller-General (Forests).

FORM No. 59.

FOREST DEPARTMENT, ASSAM.—ACCOUNT CURRENT FOR THE YEAR 1886-87.

Dr.

	Rs. As. P.	Rs. As. P.
To cash balance	.....	181 0 4
„ VIII. assessed taxes, income-tax deductions from salaries.	.....	1,868 0 2
„ Revenue as per Annual Summary Form No. 58.	.....	2,12,010 12 9
„ Service Funds— Uncovenanted Service Family Pension Fund, Bengal.	.....	635 2 0
„ Deposits	.....	.....
„ Forest Cash Remittance, Local— Forest cheques drawn	2,11,050 9 8	.....
Inter-divisional transfers	0 0 6	2,11,050 10 2
„ Advances recoverable	.....	76,211 8 4
„ Suspense	.....	1 13 0
„ Account Current other Governments— Government of India	.....	985 0 2
„ Inter-departmental transfer— Public Works Department State Railways.	.....	.....
Ditto Ditto other Branches	171 6 10	.....
Civil Departments— Mathematical Instrument Department.	3,423 7 9	.....
Jails	20 2 6	.....
Survey	119 9 0	2,813 9 4
Total	.....	5,05,773 8 3

Cr.

	Rs. As. P.	Rs. As. P.
By expenditure as per Annual Summary Form No. 58	.....	2,12,287 6
„ Deposits	.....	.....
„ Forest Cash Remittance, Local— Remittances to Treasuries	2,05,398 1 6	.....
Inter-divisional transfers	0 0 6	2,05,398 2
„ Advances recoverable	.....	79,177 5 8
„ Suspense	.....	100 8 0
„ Inter-departmental transfers— Public Works Department State Railways.	49 11 0	.....
Ditto Ditto other Branches	4,483 5 7	.....
Military Department, Bengal	2,943 0 0	.....
Civil Departments— Mathematical Instrument Department.	108 0	.....
Jails	6 8 0	.....
Survey	.....	.....
Police	158 2 0	.....
Miscellaneous	18 0 0	.....
Telegraph Department	37 0 0	7,677
„ Cash balance	.....	1,132
Total	.....	5,05,773 8

CALCUTTA:
The 2nd June 1887.

JAMES TAYLOR,
Assistant-Comptroller-General (Forests).

FORM No. 60.

FOREST DEPARTMENT, ASSAM.—REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1886-87.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the Department at end of year.
		Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Direction	Price of timber and other produce.	.....	32 12 10	32 12 10	32 12 10	.....
Working Plans	Ditto ditto.	.....	.....	.....	.....	.....
Gáro Hills	Ditto ditto.	1,374 12 0	17,680 13 4	19,055 9 4	16,755 8 7	2,300 0 9
Goálpára	Ditto ditto.	3,235 8 0	32,087 8 0	35,323 0 0	18,449 0 0	16,874 0 0
Kámrúp	Ditto ditto.	2,344 0 0	42,323 0 9	44,667 0 9	36,960 8 9	7,706 8 0
Darrang	Ditto ditto.	3,752 15 9	26,968 7 7	30,721 7 4	29,249 12 2	1,471 11 2
Nowgong	Ditto ditto.	107 4 0	5,408 15 10	5,516 3 10	5,508 7 10	7 12 0
Sibságar	Ditto ditto.	239 0 0	9,230 13 1	9,469 13 1	8,787 13 1	682 0 0
Lakhimpur	Ditto ditto.	1,630 0 0	45,047 8 6	46,677 8 6	27,262 10 0	19,414 14 6
Cachar	Ditto ditto.	2,038 4 6	45,578 6 9	47,616 11 3	44,429 1 6	3,187 9 9
Sylhet	Ditto ditto.	.....	20,277 1 0	20,277 1 0	19,812 1 0	465 0 0
Khási and Jaintia Hills	Ditto ditto.	.....	4,763 1 0	4,763 1 0	4,763 1 0	.....
Nága Hills	Ditto ditto.	.....	.....	.....	.....	.....
		14,721 12 3	249,398 8 8	264,120 4 11	212,010 12 9	52,109 8 2

FORM No. 61.

FOREST DEPARTMENT, ASSAM.—OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1886-87.

Division.	Department Debtor.			Department Creditor.			Balance due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Direction	.....	600 0 0	600 0 0	840 0 0	260 0 0	600 0 0	.....	.....
Working Plans	.....	1,923 0 0	1,923 0 0	.....	1,923 0 0	1,923 0 0	.....	.....
Garo Hills	30 10 2	18,590 10 1	18,621 4 3	966 13 1	17,356 13 11	18,323 11 0	4,702 6 9	.....
Goálpára	.....	12,222 4 6	12,222 4 6	193 14 1	12,177 0 10	12,370 14 11	148 10 5	.....
Kámrúp	.....	14,301 2 3	14,301 2 3	474 12 9	14,181 6 6	14,656 3 3	355 1 0	.....
Darrang	.....	8,737 6 11	8,737 6 11	231 1 4	9,127 15 7	9,359 0 11	621 10 0	.....
Nowgong	.....	592 1 7	592 1 7	196 13 1	595 10 6	792 7 7	200 6 0	.....
Sibságar	.....	7,873 2 5	7,873 2 5	480 13 3	8,211 8 7	8,692 5 10	819 3 5	.....
Lakhimpur	22 15 8	10,730 8 4	10,753 8 0	1,660 6 8	9,334 15 0	10,995 5 8	243 8 4	1 10 8
Cachar	.....	2,341 10 9	2,341 10 9	268 12 0	2,584 12 6	2,853 8 6	511 13 9	.....
Sylhet	.....	3,299 9 6	3,299 9 6	152 10 0	3,424 12 3	3,578 6 3	278 12 9	.....
Khási and Jaintia Hills.	.....	.....	.....	.....	.....	.....	.....	.....
Nága Hills	.....	.....	.....	.....	.....	.....	.....	.....
Total	53 9 10	76,211 8 4	76,265 2 2	4,967 0 3	79,177 15 8	84,144 15 11	7,881 8 5	1 10 8

CALCUTTA:
The 2nd June 1887.

JAMES TAYLOR,
Assistant-Comptroller-General (Forests).

FORM No. 62.

FOREST DEPARTMENT, ASSAM.—FINANCIAL RESULTS OF THE YEAR 1886-87.

Division.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction	.....	.....	33	12,330	13,691	33	26,021
Working Plans	.....	.....	.....	1,710	10,805	.....	12,545
Gáro Hills	899	2,362	15,857	11,785	13,834	16,756	27,981
Goálpára	28	.....	18,421	7,046	14,016	18,149	21,062
Kámrúp	604	11	36,356	9,147	17,965	36,960	27,123
Darrang	402	106	28,848	8,505	14,498	29,250	23,109
Nowgong	23	.....	5,485	3,158	4,721	5,508	7,879
Sibságar	337	280	8,451	7,436	11,039	8,788	18,755
Lakhimpur	.....	.....	27,263	10,495	11,628	27,263	22,123
Cachar	318	6	44,111	6,115	9,240	44,429	15,361
Sylhet	.....	.....	19,812	2,704	4,645	19,812	7,349
Khási and Jaintia Hills	1	.....	4,762	725	2,254	4,763	2,979
Nága Hills	.....	.....	.....	.....	.....	.....	.....
Total	2,612	2,765	2,09,399	81,186	1,28,336	2,12,011	2,12,287

SHILLONG:
The 20th June 1887.

GUSTAV MANN,
Conservator of Forests, Assam.

Appendix I.

Register of Reserved Forests in the Province of Assam added during 1886-87.

Date of entry.	Name of reserve.	Civil district and sub-division of district.	Number and date of notification sanctioning the reserve.	Area in acres.	Boundaries.	Statement of rights.	Remarks.
17th September 186.	Langai and Singla.	District Sylhet, Karimganj.	No. 57, dated 17th September 1886.	108,800	West.—The Tippera boundary from the Bhomsuel or Bongsul Peak, as shown on the Revenue Survey map of 1863-64, in the south to the foot of the Indurail hills near the village of Gajarbhilbary, as shown on the Topographical Survey map of 1879-82, thence along the foot of these hills. North.—A line along the base of the hills from the east bank of the Kurti to the Bali Cherra, as demarcated on the ground, thence the Bali Charra to its source, thence a line to the source of the Hathai Cherra, thence along that stream to its junction with the Langai river, thence down the Longai to its junction with the Dengua Cherra, thence along the latter stream to its source, thence the watershed of the Oylamtang Dewalia range south to the source of the Patakhauri Cherra, thence down this stream to its junction with the Singla river, thence down the Singla to its junction with the Bhutua Cherra, and thence a line along the course of the Bhutua Cherra east to the Sylhet-Cachar inter-district boundary. East.—The boundary between Sylhet and Cachar, from the source of the Bhutua Cherra to the Great Trigonometrical Survey station on the Chatachura hill. South.—The Tippera boundary from the Great Trigonometrical Survey station on the Chatachura hill in the east, to the Great Trigonometrical Survey station on the Bongsul hill in the west.		
24th February 1887.	Bagmara	District Gáro Hills, Mauza No. 1.	No. 12, dated the 24th February 1887.	12,320	East.—From the mound on the Rongrhu Githok down the Phanda stream to where it crosses the district boundary. South.—The Gáro Hills-Mymensing boundary between the Phanda stream and the boundary-post a little to the north of the village of Bhowanipur. West.—The Sameswari river from the boundary-post a little to the north of the village of Bhowanipur to its junction with the Santisukh stream.		

					North.—From the junction of the Santisukh stream with the Sameswari river, up the former stream to its source at a mound on the Santisukh Githok, then down a small watercourse on the reverse face of the hill to its junction with the Karawani stream, then up the Karawani stream to its source at a mound on the Karawani Githok, then from this mound down the Chengban stream to its junction with the Rongrhu stream, then up the Rongrhu stream to its source at a mound on the Rongrhu Githok.		
5th March 1887	Addition to the Bijni reserve.	District Goálpara, Bijni Duár.	No. 14, dated the 5th March 1887	75 526	Nrdth.—The Bhutan boundary from pillar No. 73 to the present Bijni reserved forest at pillar No. 75, thence the western, southern, and eastern boundary of the present Bijni reserved forest to pillar No. 76 of the Bhutan boundary, and along the latter to pillar No. 78, on the right bank of the Manas river. East.—Down the Manas river from pillar No. 78, on the Bhutan boundary, to boundary-mark No. 58 of the southern boundary, as demarcated and surveyed in 1886, and shown on the map of that survey. South.—A survey line running west from boundary-mark No. 58 to boundary-mark No. 1, on the Daichang nadi, as shown in the map of 1886. West.—A survey line running in a north-easterly direction from boundary-mark No. 1, on the Daichang nadi, to the Pakajanee nadi, thence up this stream to pillar No. 73, on the Bhutan boundary.		
Ditto ...	Panbari and Pechadavery.	District Goálpára Ripu Duár.	Ditto ...	3,290	North and East.—A survey line from boundary-mark No. 1 on the left of the Deosali nadi in a south-easterly direction to boundary-mark No. 5 on the Thakunthukunjhora, thence another survey line in an easterly direction to boundary-mark No. 7 on the Khaora nadi, thence down this nadi to its junction with the Boroli nadi, and down the latter stream to boundary-mark No. 8 on its right bank, thence another survey line running in a south-easterly direction to boundary-mark No. 14. South and West.—A survey line from boundary mark No. 14, in a westerly direction to boundary-mark No. 21, thence in a northerly direction to boundary-mark No. 25, thence in a north-westerly direction to boundary-mark No. 40 on the Jakati nadi, and up this stream to its junction with the Deosali nadi, and up the latter stream to boundary-mark No. 1.		
Ditto ...	Bhur ...	District Goálpára, Chirang and Sidli Duár.	Ditto ...	3,855	North.—A survey line running in a westerly direction from boundary-mark No. 1 on the left bank of the Champamoti river to boundary-mark No. 8 on the right bank of the Boro Bhur nadi, thence crossing that stream in an easterly direction to boundary-mark No. 18 on the right bank of the Mora-Bhur nadi. East.—The Mora Bhur nadi from boundary-mark No. 18 to boundary mark No. 19.		

Appendix I.—(*Continued.*)

Register of Reserved Forests in the Province of Assam added during 1886-87.

Date of entry.	Name of reserve.	Civil district and sub-division of district.	Number and date of notification sanctioning the reserve.	Area in acres.	Boundaries.	Statement of rights.	Remarks.
					South.—A survey line running due west from boundary-mark No. 19 on the Mora-Bhur nadi, to boundary-mark No. 30, on the left bank of the Bora-Bhur nadi. West.—Up the Bora-Bhur nadi from boundary-mark No. 30 to boundary-mark No. 31, thence a survey line crossing that stream and running in a westerly direction to boundary-mark No. 39, on the left bank of the Champamati river, and up this stream to boundary-mark No. 1.		
17th March 1887.	Addition to the Diju Valley reserve.	District Nowgong, Mikirpara Mahál.	No. 17, dated 17th March 1887.	3,012	North.—The boundary of the Sálona grant from point A to point B on the left bank of the Diju river, thence up the latter stream to its junction with the Haspáni river, and up the latter to point C, as shown on the map. East.—A survey line running from point C in a south-westerly direction to point D, as shown on the map. South.—A survey line running from point D in a westerly direction to point E, as shown on the map. West.—A survey line running from point E, in a north-easterly direction to point F, and in a north-easterly direction to point A, as shown on the map.	.....	.....
Ditto	Suang reserve...	District Nowgong, Duár Salona.	Ditto.	1,924	North.—The boundary of the Ghilálatá grant from point A to point B on the Khánájan, thence up this stream to its junction with a small tributary at point C, and up the latter stream to its source at point D. East.—A small tributary stream from its source near point D to its junction with the Amgirá river at point E. South and West.—The Amgirá river from point E to point F, thence a survey line running in a north-westerly direction to point A on the boundary of the Ghilálatá grant.	.....	.....
Ditto	Bamuni reserve..	District Nowgong, Duár Bamuni.	Ditto.	499	North.—The Hukanjuri grant. East.—The Mikir Hills. South.—The Bamuni grant. West.—The Nazir's grant.		
Ditto	Rangkhang reserve.	District Nowgong, Rangkhang mauza.	Ditto.	6,339	North.—A tributary stream of the Belapura nadi from its junction with the latter stream at point A to its source at point B, thence a survey line running in a south-easterly direction to point C on the left bank of the Kopili river.	.....	.....

					East.—The Kopili river from point C to its junction with the Kalang nadi, and up this latter stream to point D. South.—A survey line running from point D on the Kalang nadi in a westerly direction to point E on the Belapara nadi. West.—The Belapura nadi from point E to point A at the junction with a tributary river forming the northern boundary of this reserve.		
17th March 1887.	Sonai Kusi reserve.	District Nowgong, Gobha mauza.	No. 17, dated 17th March 1887.	10,754	North.—A survey line from point A at the foot of the hills and on the Kámrúp-Nowgong district boundary to point B, east of Sarungkusi village, thence along the foot of the hills skirting the cultivation of this village, and along the southern boundary of the Nokla grant, to point C on the Trunk Road, thence along this road to point D on the left bank of the Killing river. East.—The Killing river from point D, where it is crossed by the Trunk Road, to its junction with the Garunkusijan, and up the latter stream to point E, thence a survey line skirting the cultivation of Gobha, Ulakusi, and Garunkusi, Kamárkusi villages, and the Katori grant to point F on the left bank of the Killing river, and up this stream to point G, at its junction with the Barpani river. South.—The Killing river from point G to point H, thence a survey line skirting the cultivation of Sunaikusi village to point I on the Killing river, thence up this stream to point J, where the district boundaries of Nowgong, Kámrúp, and the Khási Hills meet. West.—The district boundary of Nowgong and Kámrúp from point J to point A.	.....	The Chief Commissioner has sanctioned by an executive order that privileges of grazing cattle and obtaining unreserved timber and firewood from the Sonaikusi reserve be continued for the present to the inhabitants of the undermentioned 19 villages:— Nakala. Amlighat. Photasil. Deobal. Bhangaraguri. Sindesur. Saran Kushi. Niz Gobha. Markang Kushi. Kamar Kushi. Belguri. Goram " Doyang. Gaolia. Tagaria. Suana " Kahi Kushi. Kotori. Nowgong.
31st March 1887.	Dehingmukh ...	District Lakhimpur, Loruah mauza.	No. 22, dated 31st March 1887.	13,747	North.—The Laruajan from its junction with the Brahmaputra up to the point where it meets the Raidang Ali. East.—The Raidang Ali from the point where it meets the Laruajan to the point where it crosses the Sessa nadi. South.—Sessa nadi from the point where it is crossed by Raidang Ali, down to its junction with Dehing river, thence down the latter stream to its junction with the Brahmaputra. West.—The Brahmaputra river from its junction with Dehing river up to its junction with Laruajan.	.....	.....

Appendix II.

STATEMENT SHOWING THE CLEARING OF BOUNDARY-LINES AND REPAIRING OF BOUNDARY-MOUNDS, AND THE INSPECTION DONE BY THE DIVISIONAL OFFICER IN EACH RESERVED AND PROTECTED FOREST DURING THE YEAR 1886-87.

Names of divisions and forests.	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1886-87.		Length of artificial boundaries and demarcated natural boundaries not cleared in 1886-87.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1886-87.	Total number of boundary-marks not repaired in 1886-87.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.		Total length of artificial boundaries and demarcated natural boundaries not inspected by the Divisional Officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
GARO HILLS DIVISION.													
Dibru Hill reserve	7	10	7	10	.....	.....	9	9	.....	5	10	2	.....
Jinari	13	68	13	68	.....	.....	5	5	.....	13	68	.....	.....
Chima and Bangshi	15	61	15	61	.....	.....	30	30	.....	.....	.....	15	61
Dhima	13	62	13	62	.....	.....	18	18	.....	.....	.....	13	62
Dilma	4	12	4	12	.....	.....	10	10	.....	.....	.....	4	12
Raja Simla	5	69	5	69	.....	.....	5	5	.....	.....	.....	5	69
Ildek	8	9	8	9	.....	.....	10	10	.....	.....	.....	8	9
Dambu	9	78	9	78	.....	.....	15	15	.....	9	78	.....	.....
Darugiri	4	23	4	23	.....	.....	16	16	.....	4	23	.....	.....
Rongrengiri	17	.....	17	.....	.....	.....	16	16	.....	17	.....	.....	.....
Emangiri	4	5	4	5	.....	.....	11	11	.....	4	5	.....	.....
Reywak	3	55	3	55	.....	.....	6	6	.....	3	55	.....	.....
Siju	2	22	2	22	.....	.....	6	6	.....	2	22	.....	.....
Bolsalgiri	2	32	2	32	.....	.....	9	9	.....	2	32	.....	.....
Tura	1	15	1	15	.....	.....	6	6	.....	1	15	.....	.....
Songsak	17	.....	17	.....	.....	.....	2	2	.....	17	.....	.....	.....
Bagmara	.....	15	.....	15	.....	.....	2	2	.....	.....	15	.....	.....
Total	130	56	130	56	.....	.....	176	176	.....	81	3	49	53

Goálpára Division.														
Bijni Duár reserve ...	...	14	40	14	40	.....	.....	59	59	.....	14	40	.....	.....
Chirang Duár reserve (eastern part)	...	7	55	7	55	.....	.....	29	29	.....	7	55	.....	.....
„ „ (western part)	...	5	35	5	35	.....	.....	26	26	.....	5	35	.....	.....
Ripu Duár reserve ...	...	5	.....	5	.....	.....	.....	19	19	.....	5	.....	.....	.....
Guma „ „ ...	...	6	.....	6	.....	.....	.....	38	38	.....	6	.....	.....	.....
Sidli „ „ ...	...	27	.....	27	.....	.....	.....	67	67	.....	27	.....	.....	.....
Panbari and Pechadaveri reserve ...	...	8	10	8	10	.....	.....	40	40	.....	8	10	.....	.....
Bengtol and Darogaon resere ...	...	3	60	3	60	.....	.....	17	17	.....	3	60	.....	.....
Bhumeswar Hill reserve ...	...	11	10	11	10	.....	.....	57	57	.....	11	10	.....	.....
Bhur reserve	...	8	40	8	40	.....	.....	39	39	.....	8	40	.....	.....
Total	...	97	10	97	10	.....	.....	391	391	.....	97	10	.....	.....
Kámrúp Division.														
Barduar reserve	...	56	45	54	55	1	70	197	197	.....	54	45	2	.....
Pantan „	...	55	5	55	5	.....	.....	131	131	.....	44	5	11	.....
Kulsi „	...	16	5	16	5	.....	.....	37	37	.....	12	5	4	.....
Milmillia „	...	24	35	24	35	.....	.....	124	124	.....	6	75	17	40
Mayang „	...	27	20	27	20	.....	.....	148	148	.....	17	20	10	.....
Chhaygaon „	...	17	2	17	2	.....	.....	83	83	.....	8	42	8	40
Kukurmara depôt	...	1	8	1	8	.....	.....	12	12	.....	1	8	.....	.....
Jara reserve	...	6	20	6	20	.....	.....	28	28	.....	6	20	.....	.....
Kawa Sing „	...	16	8	16	8	.....	.....	72	72	.....	10	.....	6	8
Rani „	...	35	.....	35	.....	.....	.....	143	143	.....	29	.....	6	.....
Mataikhar „	...	14	47	14	47	.....	.....	63	63	.....	5	70	8	57
Hájo „	...	2	64	2	64	.....	.....	19	19	.....	2	64	.....	.....
Simla Hill „	...	4	50	4	50	.....	.....	23	23	.....	4	50	.....	.....
Dumpara „	...	5	60	5	60	.....	.....	34	34	.....	5	.....	.....	60
Khaksi Sikrabura Hill reserve ...	...	18	.....	18	.....	.....	.....	140	140	.....	17	.....	1	.....
Ghoraputa „ ...	...	3	30	3	30	.....	.....	26	26	.....	2	.....	1	30
Khatkhati „ ...	...	8	60	8	60	.....	.....	53	53	.....	8	60	.....	.....
Tareibari „ ...	...	7	.....	7	.....	.....	.....	50	50	.....	6	.....	1	.....
Gorubaldha „ ...	...	3	30	3	30	.....	.....	22	22	.....	3	30	.....	.....
Khurkhuri „ ...	...	2	40	2	40	.....	.....	20	20	.....	2	40	.....	.....
Sursuria „ ...	...	6	.....	6	.....	.....	.....	29	29	.....	2	.....	4	.....
Gizang „ ...	...	5	.....	5	.....	.....	.....	35	35	.....	5	.....	.....	.....
Jaipur „ ...	...	7	21	7	21	.....	.....	48	48	.....	7	21	.....	.....
Baradobha „ ...	...	7	20	7	20	.....	.....	46	46	.....	7	.....	.....	20
Nampathar „ ...	...	5	60	5	60	.....	.....	30	30	.....	5	60	.....	.....
Barjuli „ ...	...	9	.....	9	.....	.....	.....	45	45	.....	8	.....	1	.....
Jharikhuri protected forest ...	...	8	65	8	65	.....	.....	55	55	.....	8	65	.....	.....

Appendix II.—(*Continued.*)

Names of divisions and forests.	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1886-87.		Length of artificial boundaries and demarcated natural boundaries not cleared in 1886-87.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1886-87.	Total number of boundary-marks not repaired in 1886-87.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.		Total length of artificial boundaries and demarcated natural boundaries not inspected by the Divisional Officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
Buragohain reserve	4	47	4	47	.....	.....	30	30	.....	4	47	.....	.....
Mugakhal "	1	68	1	68	.....	.....	14	14	.....	1	68	.....	.....
Total	381	10	379	20	1	70	1,757	1,757	.....	297	75	83	15
DARRANG DIVISION.													
Balipara reserve ...	2	40	2	40	.....	.....	49	49	.....	2	40	.....	.....
Chârduar Plantation "	17	10	17	10	.....	.....	1	1	.....	7	40	9	50
Garumari "	1	65	1	65	.....	.....	34	34	.....	1	65	.....	.....
Singri Hill "	.....	29	.....	29	.....	.....	5	5	.....	.....	.....	.....	29
Khalingduar "	7	30	7	30	.....	.....	104	.....	104	.....	.....	7	30
Total	29	14	29	14	.....	.....	193	89	104	11	65	17	29
NOWGONG DIVISION.													
Kholahat reserve	7	38	7	38	.....	.....	160	160	.....	7	38	.....	.....
Deboka "	6	38	6	38	.....	.....	22	22	.....	6	38	.....	.....
Diju "	11	60	11	60	.....	.....	262	232	30	11	60	.....	.....
Suang "	6	53	6	53	.....	.....	12	12	.....	6	53	.....	.....
Bamuni "	6	23	6	23	.....	.....	17	17	.....	6	23	.....	.....
Proposed Deboka "	4	24	4	24	.....	.....	26	26	.....	4	24	.....	.....
Addition to Diju "	13	25	11	25	2	.....	19	16	3	7	25	6	.....
Proposed Kholahat "	4	.....	4	.....	.....	.....	20	20	.....	4	.....	.....	.....
Rongkhong "	2	40	2	40	.....	.....	10	10	.....	2	40	.....	.....
Sonaikusi "	9	40	9	40	.....	.....	80	70	10	9	40	.....	.....
Total	72	21	70	21	2	.....	628	585	43	66	21	6	.....

Sibságar Division.														
Mikir Hills reserve ...	...	35	.....	.....	.....	35	.....	25	.....	25	.....	.....	35	.....
Holongapar " ...	...	11	60	11	60	.....	.....	32	23	9	11	60	.....	.....
Derai " ...	...	17	45	17	5	.....	40	41	16	25	17	5	.....	40
Abhaipur " ...	...	18	20	1	60	16	40	30	1	29	1	60	16	40
Upper Daigurung " ...	...	7	40	7	40	.....	.....	11	10	1	7	40	.....	.....
Lower " " ...	...	4	40	4	40	.....	.....	10	9	1	4	40	.....	.....
Sola " ...	...	8	40	8	40	.....	.....	66	21	45	8	40	.....	.....
Desai " ...	...	18	40	18	40	.....	.....	21	17	4	18	40	.....	.....
Thowrah forest ...	...	5	.....	5	.....	.....	.....	12	12	.....	5	.....	.....	.....
Dovang " ...	...	13	.....	13	.....	.....	.....	20	20	.....	13	.....	.....	.....
Total ...	...	139	45	87	45	52	.....	268	129	139	87	45	52	.....
Lakhimpur Division.														
Parapara protected forest ...	...	8	.....	8	.....	.....	.....	77	77	.....	8	.....	.....	.....
Upper Debing " ...	...	47	50	47	50	.....	.....	432	432	.....	47	50	.....	.....
Dehingmukh reserve " ...	...	2	40	2	40	.....	.....	1	1	.....	2	40	.....	.....
Jokai protected " ...	...	11	.....	11	.....	.....	.....	182	182	.....	11	.....	.....	.....
Jaipur " ...	...	16	55	14	75	1	60	269	269	.....	13	11	3	44
Kuddum " ...	...	3	30	3	30	.....	.....	46	46	.....	3	30	.....	.....
Bhorolwa " ...	...	1	30	1	30	.....	.....	16	16	.....	1	30	.....	.....
Railway concession ...	...	41	.....	.....	.....	41	.....	53	.....	53	.....	.....	41	.....
Total ...	...	131	45	88	65	42	60	1,076	1,023	53	87	1	44	44
Cachar Division.														
Upper Jiri reserve ...	...	8	30	8	30	.....	.....	72	72	.....	8	30	.....	.....
Lower " " ...	...	3	32	3	32	.....	.....	36	36	.....	3	32	.....	.....
Barak " ...	...	15	13	15	13	.....	.....	161	161	.....	15	13	.....	.....
Sonai " ..	...	10	59	10	59	.....	.....	75	75	.....	10	59	.....	.....
Katakhal " ...	...	17	29	17	29	.....	.....	204	204	.....	17	29	.....	.....
Dhaleswari " ...	...	10	46	10	46	.....	.....	66	66	.....	9	77	.....	49
Inner Line " ...	...	1	10	1	10	.....	.....	10	10	.....	.....	.....	1	10
Mupa Mahur protected forest ...	...	.....	73	.....	.....	.....	73	.....	.....	.....	.....	.....	.....	73
Langting Mupa " ...	...	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....
Total ...	...	68	52	66	59	1	73	624	624	.....	65	.....	3	52
Grand Total ...	...	1,039	53	939	10	100	43	5,113	4,774	339	783	20	256	33

Appendix III.

Area Statement of the Dambu Forest, Northern Range, Gáro Hills Division, Assam.

Block.	Number of compartment and letter of sub-compartment.	Area of Sál forest.				Area of bamboo forest.	Area of lower hill forest.	Area of grass land.	Unproductive area.	Total area.	Remarks.
		Class 1.	Class 2.	Class 3.	Total.						
Block I.	1 *a*...	.....	.....	78·0	78·0	...	...	...	.....	78·0	
	b...	31·2	.....	.....	31·2	...	...	...	.....	31·2	
	Total...	31·2	.....	78·0	109·2	...	...	...	.....	109·2	
	2 *a*...	.....	44·6	.....	44·6	...	...	...	.....	44·6	
	b...	25·4	.....	.....	25·4	...	...	...	.....	25·4	
	c...	.....	.....	31·3	31·3	...	...	...	.....	31·3	
	d...	10·8	.....	.....	10·8	...	...	...	.....	10·8	
	e...	.....	.....	.....	.....	32·3	...	...	.....	32·3	
	Total...	36·2	44·6	31·3	112·1	32·3	...	...	.....	144·4	
	3 *a*...	35·7	.....	.....	35·7	...	...	...	.....	35·7	
	b...	.....	.....	37·5	37·5	...	...	...	.....	37·5	
	c...	.....	19·4	.....	19·4	...	...	...	.....	19·4	
	d...	.....	.....	.....	.....	8·7	...	...	.....	8·7	
	e...	.....	.....	.....	.....	...	...	...	3·3	3·3	Dambu Damra road.
	Total...	35·7	19·4	37·5	92·6	8·7	...	...	3·3	104·6	
	4 *a*...	17·1	.....	.....	17·1	...	...	...	.....	17·1	
	b...	.....	68·3	.....	68·3	...	...	...	.....	68·3	
	Total...	17·1	68·3	.....	85·4	...	...	...	.....	85·4	
	5 *a*...	.....	.....	.....	.....	6·8	...	...	.....	6·8	
	b...	.....	11·6	.....	11·6	...	...	...	.....	11·6	
	c...	37·2	.....	.....	37·2	...	...	...	.....	37·2	
	d...	.....	.....	.....	.....	13·8	...	...	.....	13·8	
	Total...	37·2	11·6	.....	48·8	20·6	...	...	.....	69·4	
	6 *a*...	4·9	.....	.....	4·9	...	...	...	.....	4·9	
	b...	.....	.....	43·7	43·7	...	...	...	.....	43·7	
	c...	.....	.....	.....	.....	41·0	...	...	.....	41·0	
	d...	.....	.....	.....	.....	...	...	...	7·1	7·1	Dambu Damra road
	e...	24·0	.....	.....	24·0	...	...	...	.....	24·0	
	f...	.....	.....	4·5	4·5	...	...	...	.....	4·5	
	Total...	28·9	.....	48·2	77·1	41·0	...	...	7·1	125·2	
	7 *a*...	.....	.....	112·6	112·6	...	...	...	.....	112·6	
	b...	.....	.....	.....	.....	...	...	...	7·4	7·4	Chichura river.
	c...	23·0	.....	.....	23·0	...	...	...	.....	23·0	
	d...	.....	10·7	.....	10·7	...	...	...	.....	10·7	
	Total...	23·0	10·7	112·6	146·3	...	...	...	7·4	153·7	
	8 *a*...	.....	.....	5·9	5·9	...	...	...	.....	5·9	
	b...	.....	21·9	.....	21·9	...	...	...	.....	21·9	
	c...	27·2	.....	.....	27·2	...	...	...	.....	27·2	
	Total...	27·2	21·9	5·9	55·0	...	...	...	.....	55·0	
	9 *a*...	.....	.....	37·1	37·1	...	...	...	.....	37·1	
	b...	.....	6·9	.....	6·9	...	...	...	.....	6·9	
	c...	15·7	.....	.....	15·7	...	...	...	.....	15·7	
	Total...	15·7	6·9	37·1	59·7	...	...	...	.....	59·7	
	10 *a*...	.....	.....	67·0	67·0	...	...	...	.....	67·0	
	b...	.....	.....	.....	.....	9·4	...	...	.....	9·4	
	c...	.....	.....	.....	.....	...	...	...	1·6	1·6	Ditto.
	Total...	.....	.....	67·0	67·0	9·4	...	...	1·6	78·0	
	11 *a*...	.....	.....	46·1	46·1	...	...	...	.....	46·1	
	b...	12·9	.....	.....	12·9	...	...	...	.....	12·9	
	c...	.....	.....	.....	.....	6·8	...	...	.....	6·8	
	d...	.....	13·3	.....	13·3	...	...	...	.....	13·3	
	e...	.....	.....	.....	.....	...	...	...	3·4	3·4	Dambu Damra road.
	f...	.....	.....	.....	.....	64·8	...	...	.....	64·8	
	g...	.....	.....	.....	.....	...	...	...	2·7	2·7	Chichura river.
	Total...	12·9	13·3	46·1	72·3	71·6	...	...	6·1	150·0	

Appendix III.—(*Continued.*)

Block.	Number of compartment and letter of sub-compartment.	Area of Sál forest.				Area of bamboo forest.	Area of lower hill forest.	Area of grass land.	Unproductive area.	Total area.	Remarks.
		Class 1.	Class 2.	Class 3.	Total.						
Block I.—(*Concluded.*)	12 *a*...	.....	55·4	.....	55·4	...	...	...	.....	55·4	
	b...	57·4	.....	.....	57·4	...	...	...	.....	57·4	
	c...	.....	.....	.....	.....	...	...	...	0·6	0·6	Dambu Damra road.
	d...	.....	4·0	.....	4·0	...	...	...	.....	4·0	
	Total...	57·4	59·4	.....	116·8	...	...	...	0·6	117·4	
	Total...	322·5	256·1	463·7	1,042·3	183·6	...	...	26·1	1,252·0	
Block II.	1 *a*...	.....	20·2	...	20·2	...	...	...	.....	20·2	
	b...	.....	.....	.....	.....	42·2	...	...	.....	42·2	
	c...	51·5	.....	.....	51·5	...	...	...	.....	51·5	
	d...	.....	.....	.....	.....	...	...	...	6·8	6·8	Rongden river.
	Total...	51·5	20·2	.....	71·7	42·2	...	...	6·8	120·7	
	2 *a*...	.....	.....	.....	.....	...	...	...	2·3	2·3	Ditto.
	b...	.....	.....	3·4	3·4	...	...	...	.....	3·4	
	c...	22·8	.....	.....	22·8	...	...	...	.....	22·8	
	d...	.....	.....	97·8	97·8	...	...	...	.....	97·8	
	Total...	22·8	.....	101·2	124·0	...	...	...	2·3	126·3	
	3 *a*...	.....	.....	.....	...	...	...	...	0·6	0·6	Ditto.
	b...	26·4	.....	.....	26·4	...	...	...	.....	26·4	
	c...	.....	4·1	.....	4·1	...	...	...	.....	4·1	
	d...	.....	.....	12·5	12·5	...	...	...	.....	12·5	
	e...	5·7	.....	.....	5·7	...	...	...	.....	5·7	
	f...	.....	.....	27·9	27·9	...	...	...	.....	27·9	
	Total...	32·1	4·1	40·4	76·6	...	...	...	0·6	77·2	
	4 *a*...	28·9	.....	.....	28·9	...	...	...	.....	28·9	
	b...	.....	.....	90·6	90·6	...	...	...	.....	90·6	
	Total...	28·9	.....	90·6	119·5	...	...	...	.....	119·5	
	5 *a*...	.....	21·7	.....	21·7	...	...	...	.....	21·7	
	b...	.....	.....	.....	...	28·7	...	...	.....	28·7	
	c...	.....	.....	105·9	105·9	...	...	...	.....	105·9	
	d...	.....	.....	.....	...	...	...	...	6·5	6·5	Rongden and Chichura river.
	Total...	.....	21·7	105·9	127·6	28·7	...	...	6·5	162·8	
	6 *a*...	28·0	.....	.....	28·0	...	...	...	.....	28·0	
	b...	.....	60·1	.....	60·1	...	...	...	.....	60·1	
	c...	.....	.....	.....	...	...	...	...	0·5	0·5	Chichura river.
	Total...	28·0	60·1	.....	88·1	...	...	...	0·5	88·6	
	7 *a*...	.....	.....	3·4	3·4	...	...	...	.....	3·4	
	b...	78·4	.....	.....	78·4	...	...	...	.....	78·4	
	c...	.....	.....	7·8	7·8	...	...	...	.....	7·8	
	d...	.....	.....	.....	.....	...	...	...	9·7	9·7	Rongden river.
	e...	.....	.....	.....	.....	...	...	...	4·3	4·3	Chichura "
	Total...	78·4	.....	11·2	89·6	...	...	...	14·0	103·6	
	8 *a*...	.....	.....	.....	.....	...	...	...	0·9	0·9	Rongan river.
	b...	.....	.....	91·5	91·5	...	...	...	.....	91·5	
	Total...	.....	.....	91·5	91·5	...	...	...	0·9	92·4	
	9 *a*...	.....	.....	.....	.....	...	...	...	10·7	10·7	Ditto.
	b...	.....	.....	209·9	209·9	...	...	...	.....	209·9	
	Total...	.....	.....	209·9	209·9	...	...	...	10·7	220·6	
	10 *a*...	.....	.....	47·7	47·7	...	...	...	.....	47·7	
	b...	.....	68·1	.....	68·1	...	...	...	.....	68·1	
	c...	40·1	.....	.....	40·1	...	...	...	.....	40·1	
	d...	.....	.....	.....	.....	...	...	...	2·5	2·5	Ditto.
	Total...	40·1	68·1	47·7	155·9	...	...	...	2·5	158·4	

Appendix III.—(*Concluded.*)

Block.	Number of compartment and letter of sub-compartment.	Area of Sâl forest.				Area of bamboo forest.	Area of lower hill forest.	Area of grass lands.	Unproductive area.	Total area.	Remarks.
		Class 1.	Class 2.	Class 3.	Total.						
Block II.—(*Concld.*)	11 *a* ...	4·9	.....	.....	4·9	...	...	...	.....	4·9	
	b ...	.....	.....	.....	.....	...	...	39·5	.....	39·5	
	c ...	25·4	.....	.....	25·4	...	...	...	.....	25·4	
	d ...	.....	.....	.....	.....	...	...	...	5·5	5·5	Rongan river.
	e ...	.....	.....	14·4	14·4	...	...	...	.....	14·4	
	f ...	.....	61·6	.....	61·6	...	...	...	.....	61·6	
	g ...	1·4	.....	.....	1·4	...	...	...	.....	1·4	
	Total...	31·7	61·6	14·4	107·7	...	...	39·5	5·5	152·7	
	Total...	313·5	175·7	772·9	1,262·1	70·9	...	39·5	50·3	1,422·8	
Block III.	1 ...	.....	.....	199·6	199·6	...	...	...	.....	199·6	
	2 ...	.....	.....	178·0	178·0	...	...	...	.....	178·0	
	3 ...	.....	.....	234·1	234·1	...	...	...	.....	234·1	
	4 *a* ...	.....	.....	106·7	106·7	...	...	...	.....	106·7	
	b ...	18·1	.....	.....	18·1	...	...	...	.....	18·1	
	c ...	.....	.....	30·8	30·8	...	...	...	.....	30·8	
	Total...	18·1	.....	137·5	155·6	...	...	...	.....	155·6	
	5 *a* ...	.....	.....	.....	.....	...	...	...	3·1	3·1	River.
	b ...	.....	.....	138·1	138·1	...	...	...	.....	138·1	
	Total...	.....	.....	138·1	138·1	...	...	...	3·1	141·2	
	6 *a* ...	.....	.....	5·0	5·0	...	...	...	.....	5·0	
	b ...	.....	26·8	.....	26·8	...	...	...	.....	26·8	
	c ...	.....	.....	.....	.....	...	...	32·9	.....	32·9	
	d ...	.....	.....	.....	.....	...	...	...	1·7	1·7	Thao nala.
	Total...	.....	26·8	5·0	31·8	...	...	32·9	1·7	66 4	
	7 *a* ...	.....	.....	77·9	77·9	...	...	...	.....	77·9	
	b ...	13 9	.....	.....	13·9	...	...	...	.....	13·9	
	c ...	.....	.....	.....	.....	...	...	21·2	.....	21·2	
	Total...	13·9	.....	77·9	91·8	...	...	21·2	.....	113·0	
	8 *a* ...	17·0	.....	.....	17·0	...	...	...	.....	17·0	
	b ...	.....	.....	141 8	141·8	...	...	...	.....	141 8	
	c ...	.....	.....	.....	.....	...	...	...	0·4	0·4	River.
	Total...	17·0	.....	141·8	158·8	...	...	...	0·4	159·2	
	9 *a* ...	.....	120 7	.....	120·7	...	...	...	.....	120·7	
	b ...	24·9	.....	.....	24·9	...	...	...	.....	24·9	
	c ...	.....	.....	38·2	38·2	...	...	...	.....	38·2	
	d ...	.....	.....	.....	.....	...	...	...	86·5	86·5	Bhil.
	e ...	.....	.....	.....	.....	...	...	...	2·2	2·2	River Rongat.
	f ...	.....	.....	.....	.....	...	...	8·8	.....	8·8	
	g ...	.....	.....	.....	.....	...	...	...	1·2	1·2	River.
	Total...	24·9	120·7	38·2	159·6	...	...	8·8	89·9	282·5	
	10 *a* ...	.....	.....	134·1	134·1	...	...	...	.....	134·1	
	b ...	25·5	.....	.....	25·5	...	...	...	.....	25·5	
	Total...	25·5	.....	134·1	159·6	...	...	...	.....	159·6	
	Total...	99·4	147·5	1,284·3	1,531·2	...	...	62·9	95·1	1,689·2	

Appendix IV.

Statement showing results of valuation surveys carried on in the Dambu Forest, Northern Range, Gáro Hills Division, Assam.

Block I.

Number of compartment and letter of sub-compartment.	Sâl-trees.										Other timber trees.				
	Under 9 inches.	From 9 to 18 inches.	From 18 inches to 3 ft.	From 3 to 4½ ft.	From 4½ to 6 ft.	From 6 to 7½ ft.	From 7½ to 9 ft.	From 9 to 10½ ft.	From 10½ to 12 ft.	Over 12 ft.	Under 18 inches.	From 18 inches to 3 ft.	From 3 to 4½ ft.	From 4½ to 6 ft.	Over 6 ft.
1.	239	453	284	138	68	30	14	8	1	1	5,606	2,997	711	186	114
2.	256	537	219	76	14	9	3	1	1	1	9,967	3,269	678	182	154
3.	311	598	235	49	17	10	6	4	2	1	9,221	2,400	402	99	60
4.	207	542	359	144	36	10	4	3	3	...	3,496	1,053	220	55	41
5.	309	358	183	112	96	43	21	6	1	2	3,168	758	204	84	51
6. a & b	38	149	111	57	28	10	1	1	...	...	1,520	670	89	37	16
6. e & f	8	15	82	81	59	40	17	6	...	...	503	131	32	18	7
7. a & d	15	16	13	1	...	...	...	...	...	...	7,827	1,731	403	134	100
7. c	211	304	124	68	19	17	7	2	3	...	1,034	1,338	732	173	102
8. b & c	429	368	298	109	74	12	3	2	...	...	7,029	2,355	954	386	219
8. a	5	1	2	2	...	...	...	...	...	...	76	217	67	21	10
9.	175	163	154	83	65	30	6	2	1	...	4,019	1,122	240	70	31
10.	66	93	31	11	11	6	3	1	1	...	9,927	990	239	104	55
11. a, b, c	64	48	57	38	36	35	10	1	1	...	5,938	710	119	43	25
11. d	96	51	54	44	28	21	5	3	...	...	2,444	516	114	58	48
12. a & b	2,069	1,174	488	271	180	89	53	18	15	4	15,587	1,913	524	275	247
12. d	6	30	20	24	21	10	9	2	...	...	593	890	398	72	66

Average height of Sâl-trees between 4½ and 6 ft. in circumference 80′ 1″
" " over 6 ft. in circumference 103′ 7″.

Block II.

1.	1,025	994	1,062	397	206	103	33	14	3	...	31,502	7,815	1,376	464	427
2.	319	484	887	490	311	169	52	15	9	...	26,288	4,881	817	302	266
3. b, c, d	104	87	201	180	114	59	23	8	...	...	2,695	601	99	26	23
3. e, f	21	138	121	67	35	9	1	...	2	...	1,310	649	191	57	55
4.	28	50	88	78	48	12	7	3	...	...	2,835	827	213	74	33
5. a	53	37	18	5	...	1	...	...	..	...	440	124	37	13	16
5. c	...	...	1	...	...	...	...	...	...	...	6,070	817	109	54	48
6.	30	284	217	70	15	2	3	..	...	...	2,890	687	126	64	42
7.	2,516	2,849	854	140	60	40	29	17	4	2	2,480	486	187	71	47
8.	3	2	...	1	...	1	...	...	1	...	1,814	505	131	37	39
9.	12	46	36	31	26	15	3	1	...	...	16,732	3,481	612	319	341
10.	874	389	197	79	80	65	37	11	10	2	7,191	2,127	436	165	118
11.	662	315	146	53	19	6	3	...	...	...	4,454	1,408	306	129	106

Average height of Sâl-trees between 4½ and 6 ft. in circumference 80′ 1″
" " over 6 ft. in circumference 103′ 7″

Block III.

1.	6	4	2	8	4	7	6	...	...	...	2,594	295	64	14	26
2.	...	1	...	...	1	...	2	...	...	...	1,306	345	72	28	20
3.	3	...	3	5	6	4	5	1	...	...	1,481	361	135	46	39
4.	2	19	31	26	21	7	4	2	...	...	2,536	595	195	93	114
5.	4	4	2	...	...	8	1	...	...	...	2,194	927	330	34	64
6.	41	23	23	7	3	...	...	1	...	...	478	179	77	44	29
7.	25	24	24	24	21	12	2	2	...	...	944	252	71	25	17
8.	217	191	139	51	12	11	5	1	...	...	1,593	266	41	15	19
9.	477	583	289	106	54	36	19	8	5	...	5,070	997	192	76	54
10.	68	96	59	58	45	23	9	7	3	1	1,566	476	92	52	18

Average height of Sâl-trees between 4½ and 6 feet in circumference, 80′ 1″
over 6 feet in circumference 103′ 7″.

Appendix V.

Statement showing the result of an Examination of the Concentric rings of twenty Sâl-trees in Dambu Forest, Northern Range, Gáro Hills Division, Assam.

Number of tree.	Girth of trees over bark.	Radii, with sap-wood.	Mean.	Radii, without sap-wood.	Mean.	Number of concentric rings without sap-wood.	Mean.	Length of bole.	Remarks.
...	.....	2·00	...	1·50	.....	23	.....	Not ascertained.	
...	.....	2·00	...	1·50	.....	16	.....		
...	.....	2·25	...	2·00	.....	25	.....		
1	16·75	2·25	2·125	1·75	1·440	23	21·75	.....	
...	.....	3·00	...	2·75	.....	34	.....	Not ascertained.	
...	.....	3·25	...	2·75	.....	32	.....		
...	.....	2·25	...	1·75	.....	28	.....		
2	17·50	2·00	2·625	1·50	2·190	24	29·50	.....	No bark.
...	.....	4·50	...	3·25	.....	46	.....	Not ascertained.	
...	.....	4·00	...	3·00	.....	36	.....		
...	.....	4·00	...	3·25	.....	44	.....		
3	28·50	4·00	4·125	3·25	3·190	39	41·25	.....	Ditto.
...	.....	5·00	...	3·75	.....	56	.....	Not ascertained.	
...	.....	4·00	...	2·50	.....	33	.....		
...	.....	4·75	...	3·50	.....	46	.....		
4	29·00	4·75	4·625	3·50	3·310	39	43·50	.....	
...	.....	5·25	...	4·00	.....	46	.....	Not ascertained.	
...	.....	6·00	...	5·25	.....	56	.....		
...	.....	5·50	...	4·50	.....	50	.....		
5	36·75	6·00	5·690	4·75	4·625	53	51·25	.....	Ditto.
...	.....	8·50	..	6·75	.....	73	.....	Not ascertained.	
...	.....	8·50	...	7·50	.....	80	.....		
...	.....	7·00	...	5·75	.....	75	.....		
6	53·50	9·50	8·875	7·75	6·940	85	78·25	.....	
...	.....	8·50	...	8·00	.....	76	.....	Not ascertained.	
...	.....	13·75	...	13·00	.....	113	.....		
...	.....	9·00	...	8·25	.....	73	.....		
7	61·00	6·00	9·310	5·75	8·750	65	81·75	.....	Heartshake.
...	.....	12·75	...	11·25	.....	103	.....	.....	
...	.....	10·00	...	8·25	.....	93	.....	.....	
...	.....	15·25	...	12·00	.....	141	.....	.....	
8	76·50	10·75	12·190	9·50	10·250	99	109·00	53 feet.	
...	.....	12·00	...	10·00	.....	113	.....	Not ascertained.	
...	.....	11·00	...	9·25	.....	93	.....		
...	.....	14·25	...	13·00	.....	118	.....		
9	80·50	14·00	12·810	12·00	11·060	115	109·75	.....	
...	.....	11·75	...	11·00	.....	124	.....	.....	No bark except on radius No. 3.
...	.....	13·00	...	12·25	.....	111	.....	.....	
...	.....	14·50	...	13·50	.....	137	.....	.....	
10	83·00	12·00	12·810	11·25	12·000	123	123·75	42	Heartshake.
...	.....	13·00	...	11·75	.....	139	.....	.....	
...	.....	13·00	...	11·50	.....	117	.....	.....	
...	.....	13·75	...	12·50	.....	144	.....	.....	
11	84·00	13·25	13·250	12·00	11·940	138	134·50	66	
...	.....	13·50	...	12·00	.....	129	.....	.....	
...	.....	17·50	...	16·00	.....	175	.....	.....	
...	.....	12·00	...	11·00	.....	106	.....	.....	
12	87·50	11·00	13·500	9·50	12·375	110	130·00	75	
...	.....	16·00	...	14·75	.....	143	.....	.....	
...	.....	13·00	...	12·00	.....	127	.....	.....	
...	.....	12·50	...	11·50	.....	118	.....	.....	
13	89·50	15·00	14·125	12·00	12·560	143	132·75	52	Heartshake.
...	.....	14·50	...	13·00	.....	151	.....	.....	
...	.....	13·75	...	12·50	.....	149	.....	.....	
...	.....	17·00	...	15·75	.....	120	.....	.....	
14	90·50	12·50	14·440	11·50	13·190	128	137·00	57	Ditto.
...	.....	13·25	...	11·00	.....	92	.....	.....	
...	.....	14·50	...	11·25	.....	105	.....	.....	
...	.....	19·00	...	16·50	.....	128	.....	.....	
15	95·00	14·50	15·310	12·25	13·000	98	105·75	30	Ditto. No bark.
...	.....	20·50	...	20·00	.....	181	.....	.....	No bark except on radii 2 and 3.
...	.....	16·00	...	15·00	.....	148	.....	.....	
...	.....	15·75	...	13·00	.....	157	.....	.....	
16	109·00	14·50	15·875	13·00	15·250	152	159·50	41	Heartshake.
...	.....	15·50	...	15·00	.....	140	.....	.....	
...	.....	19·25	...	18·50	.....	181	.....	.....	
...	.....	20·00	...	19·00	.....	172	.....	.....	
17	117·00	11·50	16·560	10·00	15·620	118	152·75	55	
...	.....	22·75	...	20·50	.....	167	.....	.....	
...	.....	16·50	...	14·50	.....	121	.....	.....	
...	.....	15·75	...	13·50	.....	119	.....	.....	
18	123·00	17·50	18·125	14·75	15·810	133	135·00	74	Ditto.
...	.....	18·50	...	16·50	.....	135	.....	.....	
...	.....	19·00	...	17·00	.....	127	.....	.....	
...	.....	16·50	...	14·50	.....	143	.....	.....	
19	127·00	24·00	19·500	22·25	17·560	170	143·75	67	Ditto. No bark.
...	.....	19·00	...	17·75	.....	140	.....	.....	
...	.....	17·00	...	16·00	.....	104	.....	.....	
...	.....	29·00	...	26·75	.....	184	.....	.....	
20	135·50	17·00	20·625	15·75	18·940	135	140·75	48	Heartshake

Appendix VI.

Statement showing the result of the measurements of the height of certain trees in the Dambu Reserves, Northern Range, Gáro Hills Division, Assam.

Number of tree.	Circumference at 4½ feet above soil.	Length of bole.	Height of crown.	Remarks.
1	0′ 6½″	9′ 0″	13′ 0″	Grown on comparatively level soil.
2	0′ 7½″	8′ 9″	12′ 6″	Ditto.
3	1′ 1″	29′ 3″	39′ 1″	Ditto.
4	1′ 1½″	20′ 6″	32′ 0″	Ditto.
5	2′ 1″	28′ 9″	55′ 2″	Ditto. Much branched.
6	2′ 2½″	33′ 0″	59′ 3″	Ditto.
7	3′ 4″	45′ 11″	73′ 10″	Ditto.
8	3′ 8″	72′ 7″	86′ 5″	Ditto.
9	3′ 9½″	64′ 11″	77′ 3″	Ditto.
10	4′ 6″	37′ 7″	57′ 7″	Ditto.
11	4′ 8″	56′ 7″	81′ 7″	Ditto.
12	5′ 5″	58′ 9″	76′ 5″	Grown on the hill side in poor soil.
13	5′ 7½″	79′ 3″	107′ 8″	Grown on comparatively level soil.
14	5′ 9″	57′ 1″	77′ 1″	Ditto.
15	6′ 2″	80′ 10″	89′ 7″	Ditto.
16	6′ 3½″	50′ 6″	92′ 9″	Grown on the hill side.
17	6′ 4½″	50′ 3″	.....	Grown on comparatively level soil.
18	6′ 5″	52′ 8″	72′ 10″	Ditto.
19	6′ 10″	51′ 5″	92′ 5″	Ditto.
20	6′ 11″	42′ 0″	.....	Ditto.
21	7′ 0″	66′ 0″	.....	Ditto.
22	7′ 3½″	75′ 0″	.....	Ditto.
23	7′ 5½″	52′ 1″	.....	Ditto.
24	7′ 6″	50′ 1″	96′ 8″	Ditto.
25	7′ 6½″	57′ 0″	.....	Ditto.
26	7′ 7″	47′ 11″	109′ 11″	Ditto.
27	7′ 8″	61′ 9″	109′ 7″	Ditto.
28	7′ 10″	70′ 1″	103′ 4″	Ditto.
29	7′ 11″	30′ 0″	.....	Ditto.
30	8′ 1″	71′ 5″	123′ 11″	Ditto.
31	8′ 7″	49′ 10″	128′ 8″	Ditto.
32	8′ 10″	47′ 6″	120′ 1″	Ditto.
33	8′ 11″	64′ 6″	.....	Ditto.
34	9′ 1″	41′ 0″	.....	Ditto.
35	9′ 9″	55′ 0″	.....	Ditto.
36	10′ 3″	74′ 0″	.....	Ditto.
37	10′ 7″	67′ 0″	.....	Ditto.
38	11′ 3½″	48′ 0″	.....	Grown on the hill side.

Appendix VII.

KULSI PLANTATION MEMORANDUM.

Measurement of Trees of the different species, details of expenditure incurred, and table showing the rainfall in 1886-87.

RUBBER PLANTATION.

EASTERN BLOCK, 1873 TO 1877.

Area 88 acres.

Number of dominant trees measured.	Average height.	Average girth.
100	32 feet.	2 feet 9¼ inches.

The measurements of the largest and finest are :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	45	3	3
2	43	2	8
3	41	3	0
4	40	3	5
5	40	3	10
6	40	4	5
7	42	3	1
8	40	3	1
9	41	4	4
10	44	4	10

Number alive.	Number of vacancies.	Total.
2,395	48	2,443

The Tun-trees in this block were also counted, and found to be 14,904 in number. The average height of the Tun-trees is 26 feet, with a girth of 11½ inches. This result was obtained from the measurement of 50 dominant trees The largest and finest of which measured as follows, *viz.* :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	43	1	8
2	42	2	2
3	44	1	9
4	40	1	10
5	39	1	5

These trees are nine years old, as they were sown in 1878.
There are 180 planted bamboo clumps in this block.

WESTERN BLOCK, 1878

Area 13 acres.

Number of dominant trees measured.	Average height.	Average girth.	
		Feet.	Inches.
50	41 feet.	3	6¼

Amongst the finest are the following :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	50	2	10
2	51	5	0
3	48	4	1
4	48	2	9
5	48	3	9½
6	49	4	0
7	48	4	10
8	47	3	9
9	47	5	3
10	43	6	6

Number alive.	Vacancies.	Total.
427	5	432

In this compartment 96 bamboo clumps are alive.

RUBBER PLANTATION.

WESTERN BLOCK, 1883-84.

Area 47·55 acres.

COMPARTMENT, 1883.

21 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	19 feet.	11¼ inches.

The ten largest measured as follows :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	30	1	5
2	27	2	7
3	26	1	7
4	26	1	8
5	25	1	4
6	24	1	0
7	23	1	4
8	23	1	5½
9	22	1	6½
10	22	1	3

Number. alive.	Vacancies.	Total.
1,000	100	1,100

There are 359 bamboo clumps at present in this compartment and 4 Ceara Rubber-trees.

COMPARTMENT 1884.

26·55 Acres.

Number of dominant trees measured.	Average height.	Average girth.
50	17 feet.	9 inches.

The measurements noted below are those of the finest in this compartment :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	22	1	5
2	21	1	0
3	22	0	11
4	20	0	9½
5	20	0	9
6	23	0	10
7	21	1	0
8	21	0	9
9	21	1	2
10	20	0	10

Number alive.	Number of vacancies.	Number burnt.	Total.
642	77	517	1,236

Of those burnt, it is estimated that 50 per cent. will recover.

There are 11 Ajhar seed-beds in this compartment. The plants average 8 feet in height and 2¼ inches in girth.

The following was the expenditure in each block separately.

EASTERN BLOCK.

Compartment, 1873 to 1877.

	Rs.	As.	P.
Clearing Poma plants	28	4	3
Planting bamboos	1	2	0
Repairing fence	0	6	0
Cutting climbers	4	2	0
Transplanting Poma	4	4	6
Ditto Rubber	2	8	0
Straightening "	2	15	0
Clearing jungle	39	7	6
Measuring trees	2	4	0
Total	85	5	3

WESTERN BLOCK.

Compartment 1878, 1883 to 1884.

	Rs.	As.	P.
Planting bamboos	5	7	0
Clearing jungle	29	11	3
Cutting climbers	24	6	0
Transplanting, straightening, tying, and earthing up Rubber plants...	124	2	9
Clearing and weeding plants	33	2	9
Measuring trees	2	14	0
Total	219	11	9

TEAK PLANTATION.

COMPARTMENT, 1872.

Area 8·75 acres.

Number of dominant trees measured.	Average girth. Feet.	Inches.
50	2	9

The following are amongst the finest :—

Number.	Height. Feet.	Girth. Feet.	Inches.
1	78	3	0
2	78	2	6
3	78	2	6
4	74	3	5
5	74	2	10
6	73	2	8
7	72	3	0
8	70	3	9
9	69	4	1
10	62	3	11

In this compartment there are now 81 Pithecolobium-trees, averaging 34′ in height and 1′ 4″ in girth.

COMPARTMENT, 1873.

Area 33 acres.

Number of dominant trees measured.	Average girth.
50	2 feet 3 inches.

Amongst the largest are the following :—

Number.	Height. Feet.	Girth. Feet.	Inches.
1	64	2	11
2	58	2	4
3	63	2	2
4	60	2	1
5	58	2	5
6	68	3	1
7	67	2	7
8	65	2	8
9	72	2	5
10	66	2	6

There are also 50 Pithecolobium-trees of an average height of 35′ and 1′ 4¾″ girth.
The total expenditure in these two compartments during the year has been Rs. 25-9.

COMPARTMENT, 1874.

Area 17 acres.

Number of dominant trees measured.	Average girth.
50	2 feet 6½ inches.

The following are amongst the best, *viz* :—

Number.	Height. Feet.	Girth. Feet.	Inches.
1	63	3	2
2	70	2	10
3	73	2	9
4	71	3	0
5	75	3	5¾
6	80	4	0
7	74	3	2
8	68	2	9
9	74	3	7
10	72	2	8¾

The total expenditure in this compartment during the year has been Rs. 10-1-6.

COMPARTMENT, 1875.

Area 60 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	50 feet.	2 feet 1 inch.

The following trees were the finest measured, *viz.* :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	80	3	0
2	79	2	11
3	77	3	3
4	75	2	0
5	74	3	2
6	73	2	4½
7	72	3	5
8	69	3	0
9	67	3	10
10	59	2	7

The average height is less than was shown last year, owing to the irregularity of this plantation, and the fact of different trees being measured. There are numerous Sam-seedlings in this compartment, and some Nahor and Ajhar plants also.

The expenditure in this compartment during the year has been Rs. 83-12.

COMPARTMENT, 1878.

Area 20 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	51 feet.	1 foot 11 inches.

The ten largest trees measured as follows :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	58	3	3
2	57	1	10
3	61	2	5½
4	61	2	7
5	60	2	8
6	61	2	1½
7	56	2	5½
8	55	2	0
9	55	2	0
10	56	2	0

The expenditure in this compartment during the year has been Rs. 22-4-3.

COMPARTMENT 1879.

Area 10 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	37 feet.	1 foot 1¾ inches.

The ten largest measured respectively :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	45	1	4½
2	43	1	4½
3	43	1	6½
4	43	1	4½
5	42	1	4½
6	42	1	4½
7	42	1	1½
8	42	1	3
9	42	1	2½
10	42	1	6

The Tun-trees in this compartment were also measured, and gave the following results :—

Number of dominant trees measured.	Average height.	Average girth.
50	36 feet.	1 foot 2¼ inches.

This shows that the measurements made last year were somewhat excessive, or larger trees may have been measured.

The following measurements were taken of the finest :—

Number.	Average height.	Average girth.	
	Feet.	Feet.	Inches.
1	42	1	3½
2	42	1	5
3	42	1	5
4	41	1	8
5	41	1	4
6	40	2	0
7	41	1	2
8	41	1	4
9	41	1	1½
10	40	1	4

There are only 9 Ceara-Rubber plants left in this compartment and 3 Pithecolobium Samon trees.

The expenditure in this compartment during the year has been Rs. 3-8.

COMPARTMENT 1881.

Area 20 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	37 feet.	1 foot 3½ inches.

The largest and finest trees in this compartment were the following :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	50	1	5½
2	44	1	11
3	46	1	6
4	43	1	7
5	43	1	4
6	42	1	6½
7	42	1	6
8	42	1	6
9	42	1	6
10	41	1	8

The following trees are also found in this compartment, *viz.* :—

270 Pithecolobium Samon, average height 37 feet, and average girth 1 foot 11 inches. These are planted as an avenue alongside the road.

The Sisu-trees measured as follows :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	26	0	8
2	31	1	0
3	27	0	7
4	30	0	11
5	30	0	11½
6	27	0	10½
7	35	0	11½
8	27	0	8
9	27	0	7
10	28	0	8

Ten Ajhár-trees were also measured and give the following results, *viz.* :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	18	0	7
2	25	0	8
3	28	0	6½
4	27	0	6
5	26	0	5
6	27	0	6
7	27	0	9
8	30	1	2
9	28	0	10
10	27	0	9

126 Khoir-trees were counted, and ten of these were measured as follows :—

Number.	Height.	Girth.	
		Feet.	Inches.
1	22	0	6½
2	26	0	10½
3	20	0	6
4	30	0	9
5	18	0	4½
6	20	0	5
7	40	1	2
8	36	1	1½
9	35	1	4
10	30	0	11½

Besides the above, are some Sonaru (*Cassia fistula*) and Sam.

SISU PLANTATION, 1873.

Area 20 acres.

The growth in this plantation is slow and the trees backward on account of the heavy ikra jungle, which is not suited to their habits.

Sisu.

Number of dominant trees measured.	Average height.	Average girth.
50	37 feet.	1 foot 7¾ inches.

The best are given below, *viz.* :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	46	2	5¾
2	44	2	1½
3	43	1	10½
4	44	2	2½
5	45	2	2
6	41	2	0
7	41	2	3
8	41	1	8½
9	41	1	11
10	42	1	9¼

Poma.

Number of dominant trees measured.	Average height.	Average. girth.	
		Feet.	Inches.
50	44	2	7

The following are among the best :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	57	2	9¾
2	53	2	1¾
3	51	2	8½
4	51	3	5
5	50	2	0
6	52	3	9½
7	51	2	6½
8	50	3	3
9	50	2	5
10	49	2	1½

In this compartment are also 91 seed-beds of Ajhar, averaging 267 feet in length. The average size of the best is 6 feet in height and 2 inches in girth. They were sown in the year 1882.

The expenditure in this plantation during the year has been Rs. 61-15-6.

BAMBOO PLANTATION.

2 acres.

This was commenced in 1879, but failed, and was continued in 1880, when success was attained. There are now 284 clumps of the following species, *viz.* :—

Jati	250
Jao	22
Bijuli	12
Total	284

The average number of bamboos in each clump is 40, 30, and 80 of each kind respectively. Total number of bamboos on the two acres is, therefore, 11,620, valued at Rs. 650.

The amount expended on this plantation during the year was Re. 1 for supervision. The total cost up to date has been Rs. 345. No sales have been made, but a few have been cut for departmental use, of which a record is kept.

Cinchona Plantations.

Compartment No. 1.

Alive.	Dead.	Total.
31	264	295

Compartment No. 2.

71	152	223

Compartment No. 3.

28	20	48
130	436	566

There are only 130 plants left, averaging about 4 feet in height.

Nurseries.

The following are the results of the countings made in different nurseries :—

Rubber nursery No. 1	692
Ditto ditto 2	420
Ditto ditto 3	6,387
Total ...	7,499

Those in nursery No. 3 are all from seed, and measure from 15 feet to 20 feet in height and upwards.

Broussonetia Papyrifera.

Nursery No. 1.

This nursery contains now only 171 Paper Mulberry-trees.

Average height.	Average girth.
23 feet.	11¼ inches.

Also ten plants of *Musa textilis* and a few Ceara Rubber plants.

No. 2.

Contains 40 trees.

Average height.	Average girth.
8 feet.	4½ inches.

No. 3.

Contains 193 trees.

Average height.	Average girth.
12 feet.	4½ inches.

There are also a few seedlings of this tree in some seed-beds in another locality, and a few beds of Sisu plants also.

Miscellaneous.

Bungalow Hill.

The two Maipak-trees now measure 47 feet in height each, and have girths of 2 feet 5 inches and 1 foot 3½ inches.

There are eleven Pithecolobium-trees here also, and a few trees only of Ceara Rubber remaining, of which the best are as follows, *viz.*:—

	Ft.	Ft.	In.
1	46	2	4½
2	40	1	7
3	33	0	11
4	30	1	0
5	32	1	11

Two plants of *Musa textilis* have also been transplanted here as an experiment.

Six plants of *Castilloa Elastica*, and 14 *Landolphia*, received from the Calcutta Botanical Garden during the year, were planted out and are thriving well, with the exception of two of the former, which have died.

The total expenditure at the Kulsi on plantation works during the year, is given below, *viz.*—

		Rs.	A.	P.
1.	Rubber—			
	Older or eastern block, 88 acres	85	5	3
	New or western „ 60·55 „	219	11	9
2.	Teak—			
	Compartment 1873 to 1881, 160 acres	145	2	9
3.	Sisu ... 20 „	61	15	6
4.	Cinchona ... 2·90 „	26	3	3
5.	Experiments and exotic trees, *viz.*— *Broussonetia Papyrifera*, *Musa textilis*, Ceara Rubber, African and American Rubber.	18	12	0
6.	Nurseries	55	3	9
7.	Establishments	208	0	0
	Grand Total as per summary ...	820	6	3

Annual rainfall at the Kulsi Plantation :—

Months.	1885-86.	1886-87.
April	6·12	5·28
May	7·49	8·59
June	14·97	16·26
July	15·11	26·39
August	12·66	10·19
September	18·17	12·56
October	1·10	2·19
November	·08	·40
December	·31	·21
January	·06	1·90
February	·09	*Nil.*
March	·62	3·69
Total ...	76·78	87·66

A. J. MEIN,

Deputy-Conservator of Forests, Kámrúp Division.

GAUHÁTI :
The 26th April 1887.

Appendix VIII.

CHARDUAR CAOUTCHOUC PLANTATION MEMORANDUM.

MEASUREMENT AND COUNTING OF TREES.

Compartment	Between 5 and 10 feet.	Between 10 and 15 feet.	Between 15 and 20 feet.	Between 20 and 25 feet.	Between 25 and 30 feet.	Between 30 and 35 feet.	Between 35 and 40 feet.	Between 40 and 45 feet.	Between 45 and 50 feet.	Over 50 feet.	Vacancies.	Total.
1	1	81	239	358	357	165	44	15	6	...	...	1,266
2	8	80	287	340	262	171	57	27	29	8	...	1,269
3	22	103	184	158	128	122	141	67	39	28	...	992
4	...	69	232	379	534	384	171	73	59	74	1	1,976
5	1	12	102	450	524	546	186	67	20	13	7	1,928
6	5	30	164	450	391	84	20	4	1	1	...	1,150
7	1	36	116	360	327	210	27	7	3	3	...	1,090
8	1	19	111	140	221	366	137	27	9	2	2	1,035
9	...	151	418	288	127	25	5	1	...	...	...	1,015
10	...	46	181	308	213	54	4	...	...	...	...	836
11	1	238	928	384	71	17	...	...	...	...	1	1,640
12	...	...	...	...	...	...	...	...	...	...	...	...
13	...	88	330	89	...	...	...	...	...	...	...	507
14	...	360	952	55	...	...	...	...	...	...	2	1,369
Total April 1887	40	1,313	4,244	3,759	3,185	2,144	292	288	166	129	13	16,073
„ May 1886	249	2,602	4,976	3,219	1,952	830	446	215	124	91	160	14,864
„ April 1885	...	3,428	5,481	3,188	1,091	407	164	52	19	1	...	13,831
BAMONI HILL PLANTATION.												
Total April 1887	...	26	49	58	98	173	282	904	4	...	...	794
„ April 1886	...	37	48	63	94	178	277	97	...	...	...	794
„ April 1885	13	137	333	221	83	12	1	...	...	...	...	800

Heights and girths of fifty Rubber trees measured and each year's plantation since 1874-75.

Years when planted.	1884-85.		1885-86.		1886-87.	
	Average height in feet.	Average girth in feet.	Average height in feet.	Average girth in feet.	Average height in feet.	Average girth in feet.
	Feet. Inch.	Feet. Inch.	Feet. Inch.	Feet. Inch.	Feet. Inch.	Feet. Inch.
CHARDUAR.						
1874-75 ...	43 4	5 5	49 0	8 11	53 3	9 0
1875-76 ...	40 1	4 7	44 7	6 3	49 10	6 1
1876-77 ...	38 2	4 9	46 10	4 11	47 11	5 0
1877-78 ...	34 9	3 9	40 9	3 11	44 10	4 3
1878-79 ...	30 2	2 5	33 10	3 4	37 7	3 5
1879-80 ...	23 11	2 5	29 9	3 4	34 10	3 10
1880-81 ...	20 1	1 10	24 7	1 11	28 8	2 7
BAMONI HILL.						
1874-75 ...	24 11	5 5	36 6	2 4	40 7	3 0

Condition of Nurseries at the end of 1886-87.

Compartment number.	Area in acres.	Number of seedlings.	Height.		
			Greatest.	Average.	Least.
Old nursery in Compartment No. 2 ...	5·34	7,166	23′ 7″	9′ 11′	3′ 6″
New ditto ditto „ 2 ...	0·42	4,251	20′ 0″	11′ 0″	3′ 0′
Old ditto ditto „ 3 ...	4·08	26,759	26′ 6″	9′ 9″	3′ 6″
New ditto ditto „ 3 ...	0·39	3,717	15′ 0″	10′ 0″	3′ 0″
Nursery in ditto „ 9 ...	4·13	27,542	29′ 3″	17′ 9″	3′ 4″
Ditto ditto „ 10 ...	9·36	50,350	25′	17′ 9″	3′ 4″
Total	23·72	119,785	.....	....	.....

Details of Expenditure in the Charduar Caoutchouc Plantation during 1886-87, compared with the two previous years.

Particular.	1884-85.	1885-86.	1886-87.
	Amount.	Amount.	Amount.
	Rs. As. P.	Rs. As. P.	Rs. As. P.
11. Establishments ...	205 5 7	129 15 9	26 0 0
2. Plantation fence (including guards for nurseries) ...	453 0 0	534 10 0	726 0 0
3. Collection, carriage, sowing, and transplanting of various seedlings.	311 4 0	38 0 0	89 0 0
4. Clearing lines, removing of trees, stumps, repairing mounds, renewing stakes, and levelling paths.	1,787 14 0	1,126 12 0	1,756 8 0
5. Nurseries, fencing, weeding, drainage, &c. ...	373 15 0	408 12 0	8 0 0
6. Pruning of trees in lines ...	11 8 0	1 0 0	.....
7. Planting out Rubber plants, A770, B241, and C872.	(a) 100 4 0	(b) 28 6 0	(c) 51 0 0
8. Miscellaneous ...	72 4 0	37 2 0	15 0 0
9. Cost of completing Compartment 11 ...	.....	.....	.....
10. Ditto ditto 12 ...	71 10 0	.....	.....
11. Ditto ditto 13 ...	473 13 0	199 8 0	149 14 0
12. Ditto ditto 14 ...	519 6 0	1,888 12 0	559 3 0
13. Repairing plantation buildings ...	.....	24 14 0	77 13 0
14. Expenditure on plantation roads ...	79 8 0	.....	53 4 0
15. Weeding, clearing Nahor, Sam, Amari, and of the seedlings in compartments.	184 14 0	71 3 0	209 13 0
16. Cost of diverting the Mansiri ...	127 10 0	13 8 0	.....
17. Cost of corduroyed road between Compartments 13 and 14.	.....	.....	823 0 0
Total ...	4,722 3 7	4,004 4 9	3,989 7 0

Rainfall at the Chardúár Caoutchouc Plantation for 1886-87, as compared with the last two years.

Month.	Rainfall.		
	1884-85.	1885-86.	1886-87.
April	2·67	3·99	6·1
May	10·55	8·49	8·98
June	12·76	24·59	16·
July	12·14	17·98	24·54
August...	19·07	15·54	25·71
September	7·90	14·3	13·04
October	3·30	9·89	5·2
November	0·18	0·83	0·04
December	0·87	2·06	0·74
January	0·85	0·41	1·16
February	0·50	0·94	0·79
March	0·82	1·86	2·14
Total	71·11	100·88	104·44

TEZPUR :
The 18th April 1887.

JAMES T. JELLICOE,
Deputy-Conservator of Forests, Darrang Division.

Appendix IX.

Statement of Cost of Rubber Plantations in Assam.

Year.	Nursery work.	Planting work.	Fencing and enclosing.	Clearing of lines.	Roads and buildings.	Planting of timber-trees.	Fire protection.	Miscellaneous expenditure	Establishments.	Total.
					Charduár Rubber Plantation.					
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1873-74	.....	415	.....	.....	.....	.....	.....	.....	.....	415
1874-75	.....	2,158	178	.....	813	.....	25	24	149	3,347
1875-76	.....	3,285	5	.....	.....	.....	3	.....	.....	3,293
1876-77	.....	3,693	.....	.....	.....	.....	.....	.....	.....	3,693
1877-78	.....	3,636	.....	.....	.....	.....	.....	.....	.....	3,636
1878-79	.....	6,946	2,264	.....	.....	.....	.....	.....	.....	9,210
1879-80	.....	9,057	.....	1,382	.....	.....	.....	69	.....	10,508
1880-81	4,954	5,119	587	.....	.....	.....	.....	8	.....	10,668
1881-82	4,137	212	1,773	4,854	.....	174	.....	.....	820	11,970
1882-83	906	681	1,860	1,798	1,762	.....	.....	87	503	7,597
1883-84	771	653	500	1,064	1,537	.....	.....	38	179	4,742
1884-85	685	1,177	.....	1,738	79	185	.....	200	658	4,722
1885-86	447	1,617	535	1,127	25	73	.....	50	130	4,004
1886-87	3	799	726	1,966	454	.....	.....	15	26	3,989
Total	11,903	39,448	8,428	13,929	4,670	432	28	491	2,465	81,794
					Bamuni Hill Rubber Plantation.					
1873-74	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1874-75	.....	431	15	.....	.....	.....	.....	20	84	550
1875-76	.....	180	23	.....	.....	.....	15	.....	.....	218
1876-77	.....	56	.....	.....	.....	.....	.....	.....	.....	56
1877-78	.....	.....	.....	35	.....	.....	.....	.....	.....	35
1878-79	.....	.....	124	100	.....	.....	24	.....	84	332
1879-80	.....	77	.....	.....	.....	.....	.....	.....	.....	77
1880-81	.....	301	.....	.....	.....	.....	.....	.....	.....	301
1881-82	.....	.....	100	165	.....	.....	.....	.....	.....	265
1882-83	.....	142	.....	.....	.....	.....	.....	.....	.....	142
1883-84	.....	50	.....	.....	.....	.....	.....	.....	.....	50
1884-85	.....	.....	.....	10	.....	.....	.....	.....	.....	10
1885-86	.....	.....	.....	10	.....	.....	.....	.....	.....	10
1886-87	.....	.....	.....	10	.....	.....	.....	.....	.....	10
Total	.....	1,227	262	330	.....	.....	39	20	168	2,056

Kulsi Rubber Plantation.

	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Previous to 1873-74	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1873-74	.....	378	.....	.....	.....	.....	.....	.....	.....	378
1874-75	.....	606	.....	.....	.....	.....	.....	.....	.....	606
1875-76	.....	262	231	.....	.....	.....	19	.....	.....	512
1876-77	.....	209	.....	.....	.....	.....	.....	.....	.....	209
1877-78	.....	687	.....	.....	.....	.....	.....	88	143	918
1878-79	.....	786	.....	.....	.....	.....	.....	.....	192	978
1879-80	46	60	752	200	.....	.....	.....	51	238	1,347
1880-81	191	68	362	241	.....	.....	.....	77	467	1,406
1881-82	275	448	515	.....	3	.....	.....	26	501	1,768
1882-83	165	538	302	.....	42	.....	.....	.....	324	1,371
1883-84	261	1,293	.....	.....	.....	.....	.....	200	228	1,982
1884-85	201	825	.....	.....	.....	.....	.....	224		1,488
1885-86	251	937	.....	.....	.....	.....	.....	.....	166	1,354
1886-87	55	305	.....	.....	.....	.....	.....	.....	208	568
Total	1,445	7,402	2,162	441	45	.....	19	669	2,705	14,885

Appendix X.

Experiment in tapping 50 selected Rubber-trees (Ficus elastica) *in the Balipara Reserved Forest Darrang District, Assam, in 1887.*

The experimental tapping has now reached its fifth year, and was carried out, as in former years, no incisions being made under 4 feet from the ground, all incisions being new ones, and no old incisions were recut.

The trees in the Koliajuli Hills were tapped under the immediate supervision of the Divisional Officer, who was, however, unable to look after the work in the Sonai Hills for the reason already given in the body of the report.

Of the six additional trees selected, as stated in Appendix V. of last year's report, only two were tapped again this year, under instructions of the Conservator. For this purpose, two fresh trees, out of these six, were selected, and not the two which were tapped last year.

The list of casualties must again be increased this year by the addition of two more trees, *viz.*, Nos. 5 and 47. The former was found lying down and quite dead. In the latter, the major portion of the trunk was quite dead; only a little juice remained in the extremities of the tree, but in insufficient quantity to repay the expense of tapping.

Both these trees stood on the edge of a steep declivity, which may partly account for their fallin g On the other hand, a very fine, but by no means old, Nahor-tree was also observed to have been blown down, which appears to indicate that the winds have been exceptionally severe this year in this neighbourhood.

There are now only 46 trees remaining out of the 50 originally selected by Mr. Campbll. The 6 additional trees are also all standing.

Details will be found in the following tabular statement:—

Species.	How collected.	Trees previously tapped.		Trees never tapped before *.		Total.	
		No. of new incisions.	Yield.	No. of new incisions.	Yield.	No. of new incisions.	Yield.
			Md. S. C.		Md. S. C.		Md. S. C.
Shikabar ...	Liquid ...	.....	.....	6	0 8 0½	6	0 8 0½
" ...	Dry ...	8	0 9 6	13	0 9 14½	21	0 19 4½
Bogibar ...	Liquid ...	1	0 0 10½	...	.....	1	0 0 10½
" ...	Dry ...	11	0 12 6	7	0 4 11	18	0 17 1
	Total ...	20	0 22 6½	26	0 22 10	46	1 5 0½
Shikabar ...	Liquid ...	.....	.....	2	0 4 11	2	0 4 11
" ...	Dry ...	.....	.....	...	0 1 11½	...	0 1 11½
	Total ...	.....	.....	2	0 6 6½	2	0 6 6½
Grand Total...	...	20	0 22 6½	28	0 29 0½	48	1 11 7

* This heading has no reference to the year under report, but describes the condition of the trees when selected in the first instance.

The average yield, as compared with the two previous years, is given in the following statement:—

		1884-85.		1885-86.	1886-87.
		M. S. C.		M. S. C.	S. C.
3 trees previously tapped, gave.	M. S. C. 0 6 4	from old incision, average.	0 2 1½	22 trees 2 22 14, average 4 srs.	20 trees, 22 6½ average 1 sr.
19 ditto ditto ...	1 18 8	" new " ...	0 3 1 8/15	10 9/15 chs.	1 7/15 chs.
2 ditto never tapped ...	0 4 0	" old " ...	0 2 0	27 trees 1 md.	26 trees, 20 srs.
24 ditto ditto ...	1 14 0	" new " ...	0 2 3½	20 srs. 8½ chs. average 2 srs. 12½ chs.	10 chs., average 12 8/15 chs.
48	3 2 12			49 trees, 4 mds. 3 srs., 6½ chs.	46 * trees, 1 md. 5 srs. ½ ch.
2 ditto ditto ...	0 5 2	" " " ...	0 2 9	2 trees, 11 srs 11 chs, average 5 srs. 13½ chs.	2 * trees, 6 srs. 6½ chs. average 3 srs. 3½ chs.
	8 7 14			4 mds. 15 srs. 1½ chs.	1 md. 11 srs. 7 chs.

* Average yield of 46 trees of first selection and of 2 trees of second selection.

The falling off in this year's yield is very marked. The conditions under which the experiment was carried out this year were equally favourable with last year. It must, therefore, be assumed that the repeated tapping is beginning to have an injurious effect upon the trees, although to all outward appearance they are as luxuriant as ever.

Tapping was commenced in the Koliajuli Hills on the 5th February 1887, and the collection was completed on the 13th February.

The 11 trees were tapped in the Soni Hills on the 24th February 1887, and the "Ball" Rubber was collected from them on the 28th February. The "Loaf" or "Slab" Rubber was weighed 15 days after it had been prepared, but the "Ball" Rubber was weighed daily as it was collected. In this way the quantity shown in the returns amounted to 1md. 6 srs. 12 chs., but the quantity sold in Calcutta was only 1 md. 4 srs. 8 chs., the deficit of 2 srs. 4 chs. being due to driage.

Further details are attached in the usual form.

FOREST DEPARTMENT, ASSAM.—DARRANG DIVISION.

Statement showing the result of an experimental tapping of 53 Rubber-trees in the Balipara Reserve for the year 1886-87.

Number of trees.	Measurement of trees.			Locality and nature of soil.	Kind of trees.	Rubber extracted in balls or loaves.	Condition of trees.	Date.		Yield from each year.	Remarks.
	Height.	Girth including aerial roots.	Diameter of crown.					Tapped.	Collected.		
										Mds. S. Ch.	
1	99′	27′	92′	Valley of Bahjuli, sandy loam with pebbles.	Shikabar..	Ball	Very good, 3 main aërial roots.....	24th February 1887.	28th February 1887.	0 0 10	
2	91′	27′	100′	Side of hill near Sonai river, sandy loam.	" ...	"	Good 2 main aërial roots	" ...	" ...	0 0 12½	
3	90′	32′	110′	Ditto ditto ...	" ...	"	" 4 ditto	" ...	" ...	0 0 12	
4	110′	36′	95′	Valley of Sonai river, low sandy loam	" ...	"	" 7 ditto	" ...	" ...	0 0 5	
5	90′	47′	80′	Bank ditto ditto ...	" ...	"	" 3 ditto	" ...	" ...	0 0 9	
6	97	27′	94′	Valley of Joanjajuli, low sandy loam.	Bogibar...	"	" 3 ditto	23rd February 1887.	" ...	0 0 6½	
7	105′	28′	120′	Ditto ditto ...	" ...	"	" 2 ditto	" ...	" ...	0 0 8½	
8	122′	159′	160′	Ditto ditto ...	" ...	"	Very good, 18 main aërial roots	24th February 1887.	" ...	0 1 5½	
9	100′	27′	80′	Ditto ditto ...	" ...	"	" 3 ditto	" ...	" ...	0 0 14	
10	122′	85′	110′	South of Guinija hill, low sandy loam.	Shikabar..	"	Good, 6 main aërial roots	" ...	" ...	0 1 0	
11	122′	42′	70′	Valley of Bahjuli, low sandy loam	Bogibar...	"	" 2 ditto	" ...	" ...	0 0 6½	
12	91′	64′	120′	Foot of Guinija hill, low sandy loam.	Shikabar..	"	Very good, 4 main aërial roots.....	6th February 1887.	11th February 1887.	0 1 0	
13	118′	26′	83′	Right bank of Kaliajuli near Mansari, low, rich, sandy loam.	" ...	Loaf.....	" 2 ditto	9th February 1887.	10th February 1887.	0 0 13 0 0 2	Scrapings.
14	99′	54′	55′	Left bank of Koliajuli near Mansiri, low, rich, sandy loam	Bogibar...	Ball	Good, 8 main aërial roots	5th February 1887.	" ...	0 1 4	
15	100′	74′	142′	Ditto ditto ...	Shikabar..	"	Very good, 8 main aërial roots	" ...	" ...	0 1 4	
16	100′	54′	120′	Ditto ditto ...	" ...	"	" 2 ditto	" ...	" ...	0 0 15	
17	89′	71′	110′	Left of Chaojuli, slightly elevated, rich sandy loam.	" ...	"	" 3 ditto	6th February 1887.	11th February 1887.	0 1 14	
18	112′	80′	137′	Left of Chaojuli, low, rich, sandy loam.	Bogibar...	"	" 6 ditto	5th February 1887.	10th February 1887.	0 2 8	
19	100′	25′	83′	Ditto ditto ...	" ...	"	Good, 1 main aërial root	" ...	" ...	0 0 8	
20	120′	37′	122′	Valley of Chaojuli, low, rich, sandy loam.	Shikabar..	"	" 2 ditto	6th February 1887.	11th February 1887.	0 1 14	
21	98′	101′	100′	Left bank of Chaojuli, low, rich, sandy loam.	Bogibar...	"	" 6 ditto	7th February 1887.	12th February 1887.	0 1 1	
22	120′	69′	91′	Right bank of Koliajuli, low, rich, sandy loam.	" ...	Loaf.....	" 6 ditto	6th February 1887.	7th February 1887.	0 0 9½ 0 0 1	Scrapings.
23	120′	85′	124′	Left bank of Koliajuli, low, rich, sandy loam.	Shikabar..	Ball	" 11 ditto	7th February 1887.	12th February 1887.	0 1 1	

24	97′	73′	65	Left bank of Koliajuli, top of steep hill, sandy loam.	,, ...	,, ...	,, 8 ditto	,, ,, ...	,, ...	0 0 5		
25	100′	111′	118′	Left bank of Koliajuli, side of steep hill, sandy loam.	,, ...	Loaf ...	,, 24 ditto	10th February 1887.	11th February 1887.	0 0 4		
26	100′	17′	63′	Left bank of Koliajuli, top of steep hill, sandy loam.	,, ...	Ball ...	,, 1 ditto	10th ,, ...	12th ditto ...	0 0 2½ 0 1 5	Scrapings.	
27	97′	29′	100′	Left bank of Koliajuli, side of steep hill, sandy loam.	,, ...	Loaf ...	,, 2 ditto	10th ,, ...	11th ditto ...	0 0 2		
28	81′	20′	75′	Head of a ravine, sandy loam ...	Bogibar...	Ball ...	,, 2 ditto	8th ,, ...	12th ditto ...	0 0 3	ditto.	
29	124′	100′	96′	West of Chaojuli; top of hill, sandy loam.	Shikabar..	,, ...	,, 8 ditto	,, ,, ...	.....	0 0 7½ 0 0 12		
30	126′	46′	114′	West of Chaojuli, edge of stream, sandy loam.	,, ...	,, ...	,, 3 ditto	,, ,, ...	.....	0 0 8		
31	90′	55′	68′	East of Chaojuli, top of hill, sandy loam.	Bogibar...	,, ...	,, 4 ditto	,, ,, ...	.....	0 0 6		
32	84′	44′	67′	Koliajuli Hills, top of hill, sandy loam.	Shikabar..	,, ...	,, 4 ditto	,, ,, ...	.....	0 0 6		
33	99′	46′	78′	Koliajuli Hills, foot of hill; sandy loam.	,, ...	,, ...	,, 4 ditto	,, ,, ...	.....	0 0 3		
34	100′	37′	98′	Ditto ditto ...	,, ...	,, ...	,, 3 ditto	,, ,, ...	.....	0 0 9		
35	....	.....	.....	Fallen since last return. The tree is quite dead.	,, ...	...	.....	.....	.....	.....		
36	99′	77′	106′	Valley of Kermerjuly; slightly elevated, sandy loam.	,, ...	,, ...	,, 7 ditto	6th ditto ...	11th ditto ...	0 1 7		
37	100′	80′	84′	Ditto ditto. ditto ditto.	,, ...	,, ...	,, 6 ditto	,, ,, ...	,, ...	0 0 13		
38	98′	45′	65′	Valley of Koliajuli; sandy loam ...	,, ...	Loaf ...	Very good 4 Main aërial roots ...	5th ditto ...	6th ditto ...	0 0 15½		
39	98′	34′	70′	Koliajuli Hills; top of hill, sandy loam.	Bogibar ...	Ball ...	Good 3 ditto ...	7th ditto ...	12th ditto ...	0 0 9½ 0 0 12	ditto.	
40	90′	96′	186′	Valley of Kermerjuly; sandy loam..	,, ...	,, ...	,, 6 ditto ...	6th ditto ...	11th ditto ...	0 1 6		
41	88′	42′	75′	Ditto ditto ...	,, ...	,, ...	,, 5 ditto ...	,, ...	,, ...	0 0 9		
42	97′	89′	180′	Mouth of Kaojuli; ditto ...	,, ...	,, ...	Very good 12 ditto ...	5th ditto ...	10th ditto ...	0 2 5		
43	.....	.....	.....	See last year's return, now quite dead, a young rubber plant is growing on it.	...	...	.....	.....	.....	.....		
44	.....	.....	.....	Dead, *vide* last year's return ...	.....	...	.....	.....	.....	.....		
45	100′	28′	75′	Koliajuli Hills; top of hill, sandy loam.	Shikabar..	,, ...	Good, 4 main aërial roots ...	8th ditto ...	.....	0 0 10		
46	100′	101′	115′	Ditto ditto ditto ...	,, ...	Loaf ...	Ditto ditto ...	9th ditto ...	10th ditto ...	0 3 9		
47	.....	.....	.....	Fallen since last return. The tree is quite dead.	... .	...	.....	.....	.....	0 1 4	ditto.	
48	99′	55′	60′	Koliajuli Hills, top of hill, sandy loam.	Bogibar...	Ball ...	Good 10 ditto ...	7th ditto ...	12th ditto ...	0 1 7		
49	129′	87′	124′	Ditto, side of hill, ditto ...	,, ...	,, ...	Very good, 11 ditto ...	,, ..	,, ...	0 0 14½		
50	120′	39′	132′	Right bank of Koliajuli; top of hill.	Shikabar..	,, ...	Very good, 2 main aërial roots ...	7th ditto ...	12th ditto ...	0 0 6		
									Total ...	1 5 0½		
										Liquid.	Dry.	
55	125′	50′	125′	Valley of Koliajuli on the bank of Harkatajuli, low rich sandy loam.	Shikabar...	Loaf ...	Good 5, main aërial roots ...	11th ditto ...	12th ditto ...	0 2 10	0 0 14	
56	128′	53′	110′	Right bank of Koliajuli; sandy loam.	,, ...	,, ...	Good 3, ditto ...	.....	.....	0 2 1	0 0 6	2½ scrapings.
												5 ditto.
									Total ...	0 4 11	0 1 11½	

The "loaf" rubber was weighed 15 days after preparation.

TEZPUR :
The 14th April 1887.

J. T. JELLICOE,
Deputy-Conservator of Forests, Darrang Division.

Appendix XI.

Statement showing the number of permits granted in 1886-87, as compared with those granted in the previous year.

Name of division.	Trade permits.		Elephant permits.		Garhati permits.		Time permits.		Home permits.		Amount of fees.	
	1885-86.	1886-87	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.
											Rs.	Rs.
Gáro Hills	91	146	.....	.....	.....	.....	.....	.....	.....	.....	45	73
Foreign passes	.....	.....	.....	.....	3,281	3,380	.....	.....	.....	.....	6,562	6,759
Gáro „	.....	.....	.....	.....	2,003	2,298	.....	.....	.....	.....	751	862
Goálpára „	126	218	.....	.....	.....	.....	11	.....	154	431	74	109
Kámrup „	649	881	.....	.....	.....	.....	32	36	752	265	356	392
Darrang „	473	209	.....	.....	.....	.....	18	.....	1,414	1,287	270	105
Nowgong „	109	777	.....	.....	.....	.....	3	100	27	1,065	57	488
Sibságar „	440	226	.....	.....	.....	.....	299	244	324	750	543	357
Lakhimpur „	137	587	.....	.....	.....	.....	295	735	21	254	369	1,029
Cachar „	2,512	2,842	133	181	.....	.....	.....	.....	178	303	1,389	3,174
Sylhet „	1,627	1,809	41	34	.....	.....	.....	102	4,509	7,121	854	698
Khási and Jaintia Hills. ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	38	.....	38
Total	6,164	7,695	174	215	5,284	5,678	658	1,217	7,379	11,514	11,270	14,084

Appendix XII.

Statement of Forest Produce granted free during 1886-87.

Description of forest produce.	Gáro Hills Division.		Goálpára Division.		Kámrúp Division.		Darrang Division.		Nowgong Division.		Sibságar Division.		Lakhimpur Division.		Cachar Division.		Sylhet Division.		Khási and Jaintia Hills Division.	
	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.
(a) To rightholders.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber ..... } Garkati permits.																				
II. Firewood ..... } Garkati permits.	50	100	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	... ..	...
III. Minor forest produce ..... } Garkati permits.																				
(b) Under concessions granted by the Local Government.																				
I. Timber	630	210	45,880	2,013	3 020	155	24,110	4,822	37,815	2,824	90,820	9,020	1,39,710	20,374	6,517	213	4,434	294	75	5
Ia. Bamboos (No.)	.....	...	.....	...	46,820	525	.....	...	36,060	361	1,191	21	1,022	20	84,950	212	4,93,070	1,232	.....	...
II. Firewood	.....	...	371	3,339	1,080	10	.....	...	47,180	1,179	4,800	48	.....	...	8,832	92	52,642	4,936	.....	...
III. Minor forest produce	.....	...	.....	...	.....	...	9,651	69	9,800	74	1,400	11	2,500	19	596	37	1,11,440	1,590	.....	...
IV. Grass, grazing, and leaf fodder	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	140	4	.....	...	.....	...
V. Branches, leaves, and vegetable mould for manuring purposes.	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	..
(c) By free grants under executive orders.																				
I. Timber	.....	...	.....	...	22,664	2,367	.....	...	1,648	86	.....	...	.....	...	.....	...	.....	...	.....	...
Ia. Bamboos	.....	...	.....	...	64,500	646	.....	...	17,050	170	.....	...	.....	...	.....	...	.....	...	.....	...
II. Firewood	.....	...	.....	...	36	1	.....	...	66,610	1,640	.....	...	.....	...	.....	...	.....	...	.....	...
III. Minor forest produce	.....	...	.....	...	.....	12	.....	...	33	...	.....	...	.....	...	.....	...	.....	...	.....	...
IV. Grass, grazing, and leaf fodder	.....	...	... ..	...	3,500	14	.....	...	6,250	16	.....	...	.....	...	.....	...	.....	...	.....	...
V. Branches, leaves, and vegetable mould for manuring purposes.	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
Total	.....	310	.....	5,352	.....	3,730	.....	4,891	.....	6,350	.....	9,100	.....	20,413	.....	558	.....	8,052	.....	5

Appendix XIII.

Statement showing increase and decrease in Forest Produce removed by purchasers in 1886-87, as compared with that removed in the previous year.

Description of forest produce.		Gáro Hills Division.				Goálpára Division.				Kámrup Division.				Darrang Division.				Nowgong Division.				Sibságar Division.			
		1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.
Reserved Forests.																									
Sál-trees	c. ft.	840	870	30	....	14,280	61,440	47,160	....	46,796	82,158	35,360	....	37	275	238	....	550	780	230	....	....	....	....	....
First-class trees	do.	....	....	....	....	4,110	13,710	9,600	....	3,322	3,269	....	53	1,325	550	....	775	50	540	490	....	4,900	4,128	....	772
Second-class trees	do.	....	....	....	....	2,040	1,320	....	720	2,376	1,690	....	686	10,800	6,875	....	3,925	125	780	655	....	10,925	9,420	....	1,505
Total		840	870	30	....	20,430	76,470	56,760	720	52,496	87,117	35,360	739	12,162	7,800	238	4,700	725	2,100	1,375	....	15,825	13,548	....	2,277
First-class timber	c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Second ditto	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Third ditto	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Converted ditto	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Poles or saplings	c. ft.	....	....	....	....	....	....	....	....	....	348	348	....	34	450	416	....	....	176	176	....	21,564	4,917	....	16,647
Boats or dugouts	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	360	....	....	360
Dead wood	do.	230	....	....	230	32,870	119,420	86,550	....	23,316	23,506	190	....	237	500	263	....	....	240	240	....	604	2,040	1,436	....
Miscellaneous pieces	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	189	189	....
Trade permits	No.	6	6	....	....	126	199	73	....	649	653	4	....	....	62	62	....	....	31	31	....	....	....	....	....
Firewood	c. ft.	....	....	....	....	....	....	....	....	....	186	186	....	....	....	....	....	1,350	....	....	1,350	6,150	6,800	650	....
Ditto permits (annual)	No.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto (monthly)	do.	....	....	....	....	11	....	....	11	....	....	....	....	3	....	....	3	2	1	....	2	....	....	....	....
Charcoal	c. ft.	....	....	....	....	436	468	32	....	540	1,167	627	....	....	....	....	....	....	....	....	....	....	5,040	5,040	....
Bamboos	No.	....	162	162	....	....	....	....	....	239	....	....	239	400	400	....	....	....	....	....	....	775	2,500	1,725	....
Canes (bundles)	do.	....	....	....	....	400	2,590	2,190	11	60	....	....	60	9,600	19,550	9,950	....	4,596	....	....	4,596	4,100	5,100	1,000	....
Agar (baskets)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grass and reeds (bundles)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1,000	1,000	....
Silk-worm-trees	do.	....	....	....	....	....	....	....	....	242	263	21	....	....	....	....	....	....	....	....	....	....	....	....	....
Betel creeper	do.	....	....	....	....	....	....	....	....	26	6	....	20	....	....	....	....	....	....	....	....	....	....	....	....
Lac-trees	do.	....	....	....	....	....	....	....	....	1	8	7	....	....	....	....	....	....	....	....	....	....	....	....	....
Garkáti passes (Gáro)	do.	....	20	20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Home permits	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Protected Forest and unclassed State Forests and Waste Lands.																									
Sál-trees	c. ft.	2,150	5,830	3,680	....	90	480	390	....	32,971	35,372	2,401	....	....	....	....	....	216	....	....	216	....	676	676	....
First-class trees	do.	12,270	6,900	....	5,370	600	1,650	1,050	....	5,158	2,229	....	2,929	6,300	7,275	975	....	3,960	8,842	4,882	....	11,250	8,943	....	2,307
Second-class	do.	6,690	8,370	1,680	....	810	2,520	1,710	....	5,697	4,974	....	723	10,550	7,525	....	3,025	6,840	12,799	5,959	....	26,650	9,270	....	17,380
Total		21,150	21,150	5,370	5,370	1,500	4,650	3,150	....	43,226	43,975	2,401	3,652	16,850	14,800	975	3,025	11,016	21,641	10,841	216	37,900	18,889	676	19,687
First-class timber	c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Second-class ditto	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Third-class ditto	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Converted ditto	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Poles or saplings	c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	1,788	330	....	1,458	....	200	200	....	5,952	2,451	....	3,531
Boats or dugouts	do.	27,450	64,590	37,140	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1,664	1,664	....	4,240	4,720	480	....
Dead-wood	do.	19,360	18,400	....	960	1,150	1,680	530	....	954	110	....	844	....	225	225	....	3,633	12,405	8,772	....	1,778	1,170	....	608
Miscellaneous pieces	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Trade permits	No.	85	140	55	....	....	19	19	....	....	228	228	....	473	147	....	326	109	746	637	....	440	226	....	214
Garkáti passes (foreign)	do.	3,281	3,880	99	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto ditto (Gáro)	do.	2,003	2,278	275	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Firewood	c. ft.	....	....	....	....	....	25	25	....	1,100	....	....	1,100	....	....	....	....	....	....	....	882	12,700	22,100	9,400	....
Ditto permits (annual)	No.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto ditto (monthly)	do.	....	....	....	....	....	....	....	....	32	36	4	....	18	....	....	18	....	99	99	....	299	244	....	55
Charcoal	c. ft.	....	....	....	....	....	....	....	....	702	612	....	90	8,080	180	....	7,900	6,795	4,050	....	1,828	49,311	10,656	....	38,655
Bamboos	No.	....	....	....	....	....	....	....	....	109	....	....	100	315	539	224	....	....	4,482	4,482	....	500	1,425	925	....
Canes (bundles)	do.	....	....	....	....	100	8,250	8,150	....	2,000	9,220	7,220	....	10,325	1,108	....	9,217	24,620	43,260	18,640	....	46,160	55,700	9,540	....
Grass (ditto)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto and reeds (bundles)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Reeds (bundles)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Agar (baskets)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Leaves (dáls)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Home permits	do.	....	....	....	....	154	431	277	....	752	265	....	487	1,414	1,287	....	127	27	....	....	27	324	750	426	....
Silk-worm-trees	do.	....	....	....	....	....	....	....	....	162	46	....	116	....	....	....	....	....	....	....	....	....	....	....	....
Betel-creepers	do.	....	....	....	....	....	....	....	....	2	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....
Elephant tusks	seer.	....	....	....	....	....	....	....	....	23	....	....	23	....	....	....	....	....	....	....	....	....	....	....	....

Description of forest produce.		Lakhimpur Division.				Cachar Division.				Sylhet Division.				Khási and Jaintia Hills Division.				Nága Hills Division.				Free grants in the whole province.			
		1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.
Reserved Forests.																									
Sál-trees	c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1,350	....	....	1,350
First-class trees	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Second ditto	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	120	1,040	920	....
Total		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1,470	1,040	920	1,350
First-class timber	c. ft.	....	....	....	....	13,228	23,009	9,781	....	....	10,505	10,505	....	....	....	....	....	....	....	....	....	....	....	....	....
Second ditto	do.	....	....	....	....	14,946	18,242	3,296	....	....	1,892	1,892	....	....	....	....	....	....	....	....	....	....	....	....	....
Third ditto	do.	....	....	....	....	137,967	262,047	124,080	....	....	17,224	17,224	....	....	....	....	....	....	....	....	....	....	....	....	....
Converted timber	do.	....	....	....	....	444	85	....	359	....	470	470	....	....	....	....	....	....	....	....	....	....	....	....	....
Total		....	....	....	....	166,605	303,383	137,157	359	....	30,091	30,091	....	....	....	....	....	....	....	....	....	....	....	....	....
Poles or saplings	c. ft.	....	....	....	....	1,246	1,132	....	116	....	....	....	....	....	....	....	....	....	....	....	....	64	988	924	....
Boats or dugouts	do.	....	....	....	....	....	600	600	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dead wood	do.	....	....	....	....	1,008	3,626	2,618	....	....	....	....	....	....	....	....	....	....	....	....	....	18,618	19,502	884	....
Miscellaneous pieces	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Trade permits	No.	....	....	....	....	....	....	....	....	....	1,202	1,202	....	....	....	....	....	....	....	....	....	....	....	....	....
Firewood	c. ft.	....	....	....	....	9,278	12,396	3,118	....	....	526	526	....	....	....	....	....	....	....	....	....	10,000	65,646	55,646	....
Ditto permits (annual)	No.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto do. (monthly)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Charcoal	c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	315	315	....
Bamboos	No.	....	....	....	....	563,810	563,922	112	....	....	291,500	291,500	....	....	....	....	....	....	....	....	....	1,700	81,550	79,850	....
Canes (bundles)	do.	....	....	....	....	18,928	21,253	2,325	....	....	4,572	4,572	....	....	....	....	....	....	....	....	....	78	273	195	....
Agar (baskets)	do.	....	....	....	....	6	....	....	6	....	175	175	....	....	....	....	....	....	....	....	....	....	....	....	....
Grass and reeds (bundles)	do.	....	....	....	....	....	....	....	....	....	184,009	184,009	....	....	....	....	....	....	....	....	....	....	10,010	10,010	....
Silk-worm-trees	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Betel-creepers	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lac-trees	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Garkati passes (Gáro)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Home permits	do.	....	....	....	....	....	....	....	....	....	1,885	1,885	....	....	....	....	....	....	....	....	....	....	....	....	....
Protected forests and unclassed State forests and waste lands.																									
Sál-trees	c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	330	330	....
First-class trees	do.	25,290	21,649	....	3,641	....	....	....	....	....	....	....	....	75	120	45	....	....	....	....	....	108,450	107,510	....	940
Second-class "	do.	32,580	53,520	20,940	....	....	....	....	....	....	....	....	....	....	44,265	44,265	....	60	....	....	60	324,515	203,575	....	120,940
Total		57,870	75,169	20,940	3,641	....	....	....	....	....	....	....	....	75	44,385	44,310	....	60	....	....	60	432,965	311,415	....	121,880
First class timber	c. ft.	....	....	....	....	13,186	9,419	....	5,717	25,689	2,555	....	23,134	....	....	....	....	....	....	....	....	....	....	....	....
Second ditto	do.	....	....	....	....	4,412	10,303	5,891	....	4,122	1,806	....	2,316	....	....	....	....	....	....	....	....	....	....	....	....
Third ditto	do.	....	....	....	....	31,936	47,065	15,129	....	20,136	21,879	1,743	....	....	....	....	....	....	....	....	....	....	64	64	....
Converted ditto	do.	....	....	....	....	5,526	1,506	....	4,020	704	460	....	244	....	....	....	....	....	....	....	....	....	4,515	4,515	....
Total		....	....	....	....	57,010	68,293	21,020	9,737	50,651	26,700	1,743	25,694	....	....	....	....	....	....	....	....	....	4,579	4,579	....
Poles or saplings	c. ft.	....	20	20	....	712	7,348	6,636	....	....	....	....	....	19,500	1,177	....	18,323	....	....	....	....	3,252	11,407	8,155	....
Boats or dugouts	do.	....	3,375	3,375	....	....	17,100	17,100	....	61	45	....	16	1,850	....	....	1,850	....	....	....	....	....	....	....	....
Deadwood	do.	....	....	....	....	762	3,562	2,800	....	....	....	....	....	....	....	....	....	....	....	....	....	3,651	28,392	24,741	....
Miscellaneous pieces	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Trade permits	No.	137	587	450	....	2,512	2,842	330	....	1,627	1,809	182	....	....	38	38	....	....	....	....	....	....	....	....	....
Garkati passes (foreign)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	50	50	....
Ditto do. (Gáro)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Firewood	c. ft.	....	....	....	....	3,097	14,058	10,961	....	142	24,176	24,034	....	....	....	....	....	....	....	....	....	309,103	225,834	....	83,269
Ditto permits (annual)	No.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ditto do. (monthly)	do.	29	735	440	....	123	....	....	123	41	102	61	....	....	....	....	....	....	....	....	....	....	....	....	....
Charcoal	c. ft.	5	2,745	2,745	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bamboos	No.	....	21,146	21,146	....	108,782	218,787	110,004	....	322,200	112,785	....	209,415	....	....	....	....	....	....	....	....	1,406,562	663,113	....	743,449
Canes (bundles)	do.	317,95	542,600	24,050	....	3,549	3,180	....	369	819	2,242	1,423	....	....	....	....	....	....	....	....	....	21,137	34,957	13,820	....
Grass (do.)	do.	....	....	....	....	....	5,425	5,425	....	....	....	....	....	....	1,032	1,032	....	....	....	....	....	2,700	64,400	61,700	....
Ditto and reeds (bundles)	do.	....	....	....	....	6,027	140	....	5,887	99,035	122,526	23,491	....	....	....	....	....	....	....	....	....	56,269	140	....	56,229
Reeds (bundles)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	24,250	24,250	....
Agar (baskets)	do.	....	....	....	....	47	119	72	....	8	55	47	....	....	....	....	....	....	....	....	....	....	....	....	....
Leaves (dals)	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11,780	11,780	....
Home permits	do.	21	254	233	....	178	303	125	....	4,509	5,236	727	....	....	....	....	....	....	....	....	....	....	....	....	....
Silk-worm-trees	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Betel-creepers	do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Elephant tusks	srs.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Appen

Statement showing Increase and Decrease in Forest Revenue collected in 1886-87

Description of forest produce.	1				2				3				4				5			
	Direction.				Gáro Hills Division.				Goálpára Division.				Kámrúp Division.				Darrang Division.			
	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.
						Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forest by Government agency.	..	..	..	..	342	32	..	310	..	..	..	..	70	14	..	56	184	341	157	..
II. Timber and other produce removed from the forest by consumers or purchasers																				
RESERVE FORESTS.																				
Sál-trees	..	..	..	..	180	145	..	35	13,186	8,087	..	5,099	5,255	9,907	4,652	..	..	150	150	..
First-class tree	..	..	..	..	..	..	..	..	255	1,806	1,551	..	274	350	76	..	318	132	..	186
Second ditto	..	..	..	..	..	..	..	..	309	77	..	232	82	55	..	27	864	550	..	314
Total	..	..	..	..	180	145	..	35	13,750	9,970	1,551	5,331	5,611	10,312	4,728	27	1,182	832	150	500
First-class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Second ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Third ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Converted timber (pieces)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poles or saplings	..	..	..	..	..	..	..	..	50	5	..	45	6	3	..	3	..	4	4	..
Boats or dugouts	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dead wood	..	..	..	..	24	..	..	24	7,705	6,637	4,932	..	4,020	4,139	119	..	31	55	24	..
Fire-wood	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..
Ditto licenses (monthly)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
Ditto ditto (annual)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Charcoal	..	..	..	..	..	..	..	..	6	6	..	..	7	3	..	4	..	..	..	..
Bamboos	..	..	..	..	..	2	2	..	..	..	..	..	2	..	..	2	8	10	2	..
Canes	..	..	..	..	..	..	..	..	3	19	16	..	..	..	..	..	76	147	71	..
Grass	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trade permit fees	..	..	..	..	3	3	..	..	55	..	..	55	284	..	..	284	19	31	12	..
Home permits	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pass fees	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	5	..	..	..	..
Miscellaneous minor produce	..	..	..	..	..	..	..	..	..	..	..	..	41	23	..	18	..	..	..	..
Rubber-mahals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Agar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass and reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Permit and pass fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Garkati passes (Garo)	..	..	..	..	..	7	7	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Reserve Forests	..	..	..	..	207	157	9	59	13,569	16,637	6,499	5,431	9,976	14,482	4,849	343	1,519	1,079	263	503
PROTECTED FORESTS AND UNCLASSED STATE FORESTS AND WASTE LANDS.																				
Sál-trees	..	..	..	..	2,344	1,245	..	1,100	20	85	65	..	3,415	5,338	1,913	..	..	..	..	..
First-class trees	..	..	..	..	2,718	2,040	..	678	66	114	48	..	724	248	..	476	1,512	1,746	234	..
Second ditto	..	..	..	..	350	541	191	..	52	164	112	..	138	154	16	..	844	602	..	242
Miscellaneous trees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	5,408	3,826	191	1,773	138	363	225	..	4,277	5,740	1,929	476	2,356	2,348	234	242
First class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Second ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Third ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Converted timber (pieces)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..	10
Poles and saplings	..	..	..	..	..	..	..	..	3	..	..	3	..	..	..	..	20	3	..	17
Boats or dugouts	..	..	..	..	..	..	..	..	180	16	..	164	..	..	..	..	..	..	..	..
Ditto *ad valorem* duty of 1 per cent.	..	..	..	..	528	1,000	472	..	..	..	..	..	..	..	..	..	..	..	..	..
Timber on land allotted for cultivation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4,687	2,837	..	1,850
Dead wood	..	..	..	..	1,467	1,702	235	..	79	62	..	17	161	126	..	35	..	19	19	..
Firewood	..	..	..	..	..	..	..	..	..	5	5	..	..	..	..	..	..	..	..	..
Ditto licenses (monthly)	..	..	..	..	..	..	..	..	..	..	..	..	33	36	3	..	16	..	..	16
Ditto ditto (annual)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	..	9
Charcoal	..	..	..	..	..	..	..	..	19	4	..	15	10	22	12	..	50	1	..	49
Bamboos	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	3	7	11	..	..
Canes	..	..	..	..	..	..	..	..	1	215	214	..	15	69	54	..	79	8	..	71
Reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grazing dues	..	..	..	..	55	320	265	..	..	..	..	..	..	..	..	..	..	..	..	..
Garkati licenses	..	..	..	..	8,836	7,635	..	1,201	..	..	..	..	..	..	..	..	..	..	..	..
India-rubber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Burber mahals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22,312	22,315	3	..
Trade permit fees	..	..	..	..	43	70	27	..	..	..	..	..	..	..	..	..	56	74	18	..
Pass fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	65	..	..	65
Permit and pass fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lac mahals	..	..	..	..	..	..	..	..	22	..	..	22	..	..	..	..	56	..	..	56
Miscellaneous minor produce	..	..	..	..	..	..	..	..	..	9	9	..	224	12	..	212	..	..	..	..
Agar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass mahal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grass and reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cane mahal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Home-consumption permits	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bonkas mahal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leases for cherras	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Protected Forests and unclassed State Forests and Waste Lands	..	..	..	..	16,337	14,553	1,190	2,974	442	674	458	221	4,723	6,998	1,999	724	20,728	27,616	278	2,385
Add outstandings realised during the year	..	..	..	..	..	..	..	..	..	..	..	..	6,330	6,656	302	..	..	..	..	..
Total Revenue under II.	..	..	..	..	16,544	14,710	1,199	2,033	14,011	17,311	6,952	5,652	21,052	27,136	7,150	1,067	31,049	28,895	541	2,885
III. Drift and waif wood and confiscated forest produce	..	..	..	..	261	861	600	..	15	28	13	..	259	590	331	..	62	50	..	12
IV. Revenue on forests not managed by Government	..	..	..	..	689	712	23	..	24	113	89	..	..	7,375	7,375	..	..	..	..	..
V. Miscellaneous	12	33	21	..	982	435	..	548	873	996	123	..	1,882	1,847	965	..	71	164	93	..
Grand Total	1	33	21	..	18,813	16,756	1,834	2,891	16,923	18,448	7,178	5,652	22,243	36,901	15,821	1,123	31,359	29,250	291	2,900

dix XIV.

as compared with that collected in the previous year.

6				7				8				9				10				11				12			
Nowgong Division.				Sibsâgar Division.				Lakhimpur Division.				Cachar Division.				Sylhet Division.				Khâsi and Jaintia Hills Division.				Nâga Hills Division.			
1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
216	260	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	108	96	..	1,544	709	..	835	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	64	54	..	2,143	716	..	1,427	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
238	432	194	..	3,687	1,425	..	2,262	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	4,191	5,509	1,318	..	..	2,626	2,626	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	3,811	3,598	..	213	..	355	355	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	8,118	15,175	7,057	..	..	1,077	1,077	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	15,920	24,082	8,375	213	..	4,058	4,058	..	..	..	..	..	..	..	..	..
..	..	..	..	..	511	511	..	..	..	..	..	..	20	20	..	..	62	62	..	..	..	..	..	..	..	..	..
..	7	7	..	235	103	..	132	..	..	..	..	19	28	9	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	2	..	..	2	..	..	..	..	75	60	..	15	..	..	..	..	..	..	..	..	..	..	..	..
..	88	88	..	93	51	..	42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	72	48	..	24	..	8	8	..	..	..	..	..	..	..	..	..
17	1	..	16	123	59	..	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	9	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	23	35	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
167	..	..	167	8	25	17	..	..	..	..	..	1,325	1,331	6	..	..	729	729	..	..	..	..	..	..	..	..	..
34	..	..	34	29	38	9	..	..	..	..	..	1,166	1,325	159	..	..	286	286	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	16	13	..	46	33	..	13	..	..	..	..	..	..	..	..	..	1,218	1,218	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	942	942	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	62	62	..	..	..	..	..	..	..	..	..
..	3	3	..	93	81	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	700	..	..	700	..	250	250	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	9	..	..	9	..	263	263	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	446	446	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	2,098	..	..	2,098	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
459	547	305	217	4,939	2,373	158	2,524	..	..	..	..	21,384	26,894	8,569	3,059	..	8,324	8,324	..	..	..	..	..	..	..	..	..
..	..	..	..	731	423	..	308	..	..	..	..	..	..	..	..	..	..	..	..	740	..	..	740	..	..	..	..
1,584	1,762	178	..	2,441	1,572	..	869	2,249	4,115	1,866	..	..	..	..	..	..	..	..	..	15	24	9	..	..	..	..	..
574	1,027	453	..	921	687	..	234	2,553	3,576	1,024	..	..	..	..	..	..	..	..	..	..	3,029	3,029	..	4	..	..	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2,158	2,789	631	..	4,093	2,682	..	1,411	4,801	7,691	2,890	..	..	..	..	..	..	..	..	..	755	3,053	3,038	740	4	..	..	4
..	..	..	..	..	..	..	..	..	..	..	..	4,006	2,127	..	1,879	6,422	639	..	5,783	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	832	1,914	1,082	..	773	339	..	434	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	2,110	2,688	578	..	1,259	1,367	108	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	6,948	6,729	1,660	1,879	8,454	2,345	108	6,217	..	..	..	..	..	..	..	..
..	..	..	..	..	527	527	..	..	279	279	..	39	78	39	..	72	206	134	..	..	..	..	..	..	..	..	..
206	6	..	200	52	51	..	1	..	..	..	..	4	30	26	..	..	..	..	..	194	..	..	194	..	..	..	..
..	180	180	..	245	321	76	..	111	338	227	..	930	1,058	128	..	5	152	147	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	9	9,057	548	..	8,509	1,726	1,459	..	267	2,408	917	..	1,491	314	834	320	..	..	..	..	..	..	..	..	..
..	494	494	..	112	52	..	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	20	54	34	..	13	378	365	..	..	..	..	..	..	..	..	..
14	99	85	..	244	221	..	23	698	735	37	..	..	..	..	..	..	102	102	..	..	..	..	..	..	..	..	..
9	..	..	9	9	..	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
77	70	..	7	510	148	..	362	25	38	13	..	..	..	..	..	10	..	..	10	..	..	..	..	..	..	..	..
307	91	..	216	54	26	21	..	24	444	220	..	268	335	67	..	806	282	..	524	..	..	..	..	..	..	..	..
209	328	114	..	324	418	94	..	3,356	2,340	..	1,016	221	156	..	65	307	140	..	167	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	17	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
128	88	..	40	..	..	..	..	6,400	11,650	5,250	..	1,150	500	..	650	..	..	..	..	..	350	350	..	..	..	..	..
224	373	149	..	189	166	..	23	180	294	114	..	..	..	..	..	1,497	625	..	872	..	..	..	..	..	..	..	..
..	32	32	..	..	..	..	..	..	..	..	..	..	..	..	..	711	635	..	76	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	896	..	..	896	..	..	..	..	..	..	..	..	..	..	..	..
249	199	..	50	44	..	..	44	12	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	64	54	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,913	49	..	1,864	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	70	179	109	..	109	402	293	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	43	45	2	..	1,270	1,035	..	235	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	65	14	..	51	638	302	..	336	..	97	97	..	..	..	..	..
..	..	..	..	..	..	..	..	..	1,900	1,900	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,812	2,618	806	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	487	488	1	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	915	915	..	..	..	..	..	..	..	..	..
3,600	4,868	1,789	531	14,884	5,160	718	10,442	17,383	26,297	10,247	1,283	32,962	10,695	2,065	5,032	16,705	11,459	3,192	8,437	2,862	3,549	3,485	2,798	4	..	..	4
..	130	130	..	..	89	89	..	..	600	600	..	..	1,566	1,566	..	..	..	..	..	..	..	..	..	..	..	..	..
4,059	5,485	2,174	748	19,223	7,622	1,365	12,966	17,383	26,897	10,847	1,283	34,416	38,043	12,[illegible]	8,091	16,705	19,783	11,515	8,437	2,862	3,549	3,485	2,798	4	..	..	4
115	23	..	92	197	357	140	..	76	..	..	76	302	317	15	..	30	..	..	30	..	1	1	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	5,253	1,404	..	3,849	..	..	..	..	4,319	1,024	..	3,295	..	..	..	..
..	..	..	..	603	829	224	..	643	866	..	277	683	4,163	3,480	..	402	29	..	373	39	189	151	..	..	..	..	..
4,174	5,508	2,174	840	20,023	8,788	1,729	12,966	18,052	27,763	10,847	1,636	40,684	44,429	15,898	11,940	17,137	19,812	11,515	8,840	7,212	4,763	3,637	6,093	4	..	..	4

Appendix XV.

Forest Produce exported from and remaining in the District of Cachar at the close of 1886-87.

SILCHAR AND SIYALTEK.

Description of forest produce.	Quantity of forest produce which passed the Silchar revenue station.			Quantity of forest produce which had passed the Silchar revenue station and was again checked at Siyaltek revenue station.			Amount of forest produce which remained in the district at the close of the year.		
	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.
Logs	7,578	6,311	13,889	2,235	4,472	6,707	5,343	1,839	7,182
Agar	20	.....	20	20	.....	20	.....	.....	.....
Posts and plants	20	323	343	20	296	316	.....	27	27
Poles	249	.....	249	27	.....	27	222	.....	222
Bamboos...	776,047	43,905	819,952	515,110	3,110	518,220	260,937	40,795	301,732
Canes (bundles)	18,680	3,299	21,979	16,053	1,677	17,730	2,627	1,622	4,249
Sun-grass and reeds (cubic feet)	1,825	1,168,500	1,170,325	.....	1,000,712	1,000,712	1,825	167,788	169,613
Firewood (mds.)	2,194	13,007	15,201	.....	28	28	2,194	12,979	15,176
Dugouts...	88	3	91	....	.....	.....	88	3	91

Matijuri and Siyaltek.

Logs	1,418	2,208	3,626	1,041	933	1,974	377	1,275	1,652
Agar	99	.....	99	38	.....	38	61	.....	61
Posts and planks	.....	74	74	.....	62	78	.....	12	12
Poles	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos...	130,450	61,551	192,005	104,500	52,790	157,290	25,950	8,765	34,715
Canes (bundles)	6,816	7,197	14,013	5,92[illegible]	5,876	11,799	893	1,321	2,214
Sun-grass and reeds...	.....	13,500	13,500	....	1,950	11,950	.....	1,550	1,550
Firewood (mds.)	.....	736	736		....	.....	.....	736	736

Appendix XV.—(*Continued.*)

Statement showing the Forest Produce removed from Government, Foreign, and Private Forests in the Cachar Division in the year 1886-87.

Revenue station.	Locality.	Logs.			Agar.		Posts and planks.			Poles.		Dugouts.			Bamboos.		Canes.		Sun-grass and reeds.		Charcoal.		Firewood.		Fees.
		Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Amount.	Cubic feet.	Amount.	Maunds.	Amount.	Maunds.	Amount.	Amount.
				Rs. A.		Rs. A.			Rs. A. P.		Rs. A.			Rs.		Rs. A. P.		Rs. A.		Rs. A.				Rs. A. P.	Rs. A.
Sonai	Government.. Reserved forests	6,288	240,606	20,850 8	..	..	.....	..	.....	249	27 14	11	660	66	512,610	1,281 8 3	14,728	920 8	.....	..	..	..	1,544	48 4 0	249 0
	Government.. District ditto	1,110	40,953	4,497 13	20	30 0	.....	..	.....	..	.....	77	4,620	462	22,800	57 0 0	2,210	138 2	1,825	4 9	..	..	650	20 5 0	36 0
	Total	7,395	281,559	25,328 2	20	30 0	.....	..	.....	249	27 14	88	5,280	528	535,410	1,338 8 3	16,938	1,058 10	1,825	4 9	..	..	2,194	68 9 0	285 0
	Foreign	187	4,860	550 9	..	..	20	127	9 14 9	40	5 0	1	60	6	240,637	601 9 6	1,742	108 14	.....	..	..	..	.....	.....	17 0
	Private	6,311	128,853	.....	..	..	323	1,604	.....	..	.....	3	180	..	43,905	.....	3,299	.....	1,168,500	..	1,141	..	13,007	.....	..
	Total Sonai	13,859	410,272	25,878 11	20	30 0	343	1,731	9 14 9	289	32 14	92	5,520	534	819,952	1,940 1 9	21,979	1,167 8	1,170,325	4 9	1,141	..	15,201	68 9 0	302 0
Matijuri	Government . Reserved forests	1,321	52,519	4,089 15	..	..	.....	..	.....	1	0 2	..	..	..	52,950	132 6 0	6,653	415 13	.....	..	..	..	.....	.....	54 8
	Government . District ditto	97	3,551	575 5	99	148 14	.....	..	.....	..	.....	..	..	..	38,200	95 8 0	100	6 4	.....	..	..	..	.....	.....	10 0
	Total	1,418	56,070	4,665 4	99	148 14	.....	..	.....	1	0 2	..	..	..	91,150	227 14 0	6,753	422 1	.....	..	..	..	.....	.....	64 8
	Foreign	....	.....	.....	..	..	.....	..	.....	..	.....	..	..	..	39,300	98 4 0	63	3 15	.....	..	..	..	.....	.....	..
	Private	2,208	53,589	.....	..	..	74	79	.....	..	.....	..	..	..	61,555	.....	7,197	.....	13,500	..	..	..	736	.....	..
	Total Matijuri	3,626	109,659	4,665 4	99	148 14	74	79	.....	1	0 2	..	..	..	192,005	326 2 0	1,403	426 0	13,500	..	..	..	736	.....	64 8
Siyaltek	Government .. Reserved forests	....	660	67 6	..	..	125	85	19 14 9	..	.....	..	..	..	600	1 8 0	100	6 4	.....	..	..	..	.....	.....	..
	Government .. District ditto	618	17,793	1,649 6	..	..	41	119	10 4 9	353	37 12	..	..	..	72,837	182 1 6	214	13 6	5,475	13 11	..	..	637	19 14 6	40 0
	Total	618	18,453	1,716 12	..	..	166	204	30 3 6	353	37 12	..	..	..	73,437	183 9 6	314	19 10	5,475	13 11	..	..	637	19 14 6	40 0
	Foreign	....	.....	.....	..	..	.....	..	.....	..	.....	..	..	..	1,000	2 8 0	.....	.....	.....	..	..	..	.....	.....	..
	Private	677	18,958	.....	..	..	117	160	.....	8	.....	..	..	..	82,960	.....	300	.....	24,000	..	..	..	87	.....	..
	Total Siyaltek	1,295	37,411	1,716 12	..	..	283	364	30 3 6	361	37 12	..	..	..	167,397	186 1 6	614	19 10	29,475	13 11	..	..	724	19 14 6	40 0

Appendix XV.—(*Continued.*)

Statement showing the Increase and Decrease in Forest Produce from the Government, Foreign, and Private Forests in the Cachar Division during 1886-87, as compared with 1885-86.

Description of forest produce.	Government forests.								Foreign forests.								Private forests.			
	1885 86.			1886 87.					1885 86.			1886 87.								
	Royalty paid.	Royalty outstanding.	Total.	Royalty paid.	Royalty outstanding.	Total.	Increase.	Decrease.	Royalty paid.	Royalty outstanding.	Total.	Royalty paid.	Royalty outstanding.	Total.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Logs	5,795	321	6,116	9,431	674	10,105	3,989	...	727	22	749	160	133	293	...	456	7,652	9,196	1,544	.....
Agar	73	...	73	119	.....	119	46	...	.....	...	.....	.....	...	.....	...	...	.....	.....	.....	.....
Poles	1,311	8	1,319	603	40	643	...	676	78	...	78	40	...	40	...	38	.....	8	8	.....
Posts and planks	93	9	102	166	.....	166	64	...	.....	...	.....	20	18	38	38	...	876	514	.....	312
Bamboos	6,93,318	34,750	7,28,068	6,99,997	31,662	7,31,659	3,591	...	2,58,325	8,700	2,67,025	2,80,937	2,800	2,83,737	16,712	...	1,80,782	1,88,420	7,638	.....
Canes	22,878	294	23,172	24,005	128	24,133	961	...	377	...	377	1,805	...	1,805	1,428	...	9,745	10,796	1,051	.....
Sungrass and reeds	40,080	...	40,080	7,300	...	7,300	.....	32,780	...	...	.....	.....	...	...	...	...	14,83,478	14,22,000	.....	61,478
Firewood	4,413	...	4,413	2,831	160	2,991	.....	1,422	3,210	...	3,210	...	...	.....	...	3,210	24,666	13,830	.....	10,836
Charcoal	.....	...	.....	.....	.....	.....	.....	...	.....	...	...	.....	...	.....	...	...	1,915	1,141	.....	774
Dugouts	.....	...	.....	88		90	90	...	.....	...	.....	1	...	1	1	...	.....	3	3	.....

Forest Produce passed at Patharkandi, Kanairghat, South Sylhet, and Habiganj during each month in 1886-87.

Months.	Patharkandi.								Kanairghat.								South Sylhet.				Habiganj.			
	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sungrass and reeds.	Firewood	Amount realised.	Logs.	Posts and planks.	Bamboos.	Canes.	Sungrass and reeds.	Firewood.	Dugouts.	Amount realised.	Posts and planks.	Bamboos.	Sungrass and reeds.	Amount realised.	Logs.	Bamboos.	Sungrass and reeds.	Amount realised.
								Rs. As. P.								Rs. As. P.				Rs. As.				Rs. As.
April 1886	...	...	62	9,600	11	.....	...	39 2 0	21	15	5,160	6	...	2,877	1	181 5 0	...	...	8,200	20 8	...	...	...	.....
May "	50	77	...	3,800	...	82,000	40	459 1 0	...	...	.....	...	...	...	...	.....	...	..	...	.....	...	...	...	.....
June "	194	29	27	50,650	763	50	80	582 15 6	44	...	3,200	...	..	30	...	87 2 0	3	...	..	22 8	...	...	...	.....
July "	265	...	18	74,200	312	5 175	...	951 7 3	41	...	1,600	73	...	...	...	83 14 0	...	...	...	.....	...	...	...	....
August "	154	3	2	30,450	577	4,200	42	650 6 0	3	...	1,025	88	8	1,605	4	70 11 9	...	...	...	.....	...	...	...	.....
September "	69	...	53	35,950	534	400	6	423 14 9	9	...	.....	...	...	240	...	271 2 0	...	2,000	...	5 0	...	...	...	.....
October "	318	...	306	54,875	679	1,090	87	1,610 2 0	228	8	.....	...	...	3,767	2	608 11 9	...	...	...	.....	1	14,000	...	42 14
November "	157	3	109	59,075	1,717	26 082	310	1,517 3 3	26	...	.....	...	..	...	...	314 11 0	...	...	...	.....	...	...	...	.....
December "	34	66	30	4,900	231	42,900	32	319 14 0	22	6	.....	...	...	1,160	3	109 0 6	...	...	...	.....	...	...	...	.....
January 1887	70	1	4	9,500	369	14,504	...	278 14 0	...	4	.....	...	...	...	2	2 5 6	...	...	...	.....	...	...	175	0 7
February "	135	50	21	2,750	22	37,829	70	460 2 0	26	32	1,000	32	2,472	...	33	146 5 3	...	...	...	.....	...	400	...	1 0
March "	92	...	41	18,550	1,060	81,450	15	619 0 6	7	20	1,500	...	...	2,000	...	178 0 0	...	...	...	.....	...	...	...	.....
Total	1,538	229	673	374,400	6,615	295,680	682	7,912 2 3	511	85	13,485	199	2,480	11,669	45	2,053 4 9	3	2,000	8,200	48 0	1	14,400	175	44 5

Appendix XV.—(*Concluded.*)

Statement showing the Forest Produce removed from the Government, Foreign, and Private Forests, in the Sylhet Division in the year 1886-87.

Revenue stations.	Locality.	Logs.			Agar.		Posts and planks.			Dugouts.			Bamboos.		Canes.		Sun-grass and reeds.		Firewood.	
		Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Amount.	Cubic feet.	Amount.	Number of maunds.	Amount.
				Rs. As. P.		Rs. As. P.			Rs. As. P.			Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.
Pathar-kandi.	Government—																			
	Reserve	1,227	29,621	4,057 10 0	175	262 14 0	223	470	61 8 6	..	....	.....	291,500	728 12 0	4,572	285 12 0	184,009	446 4 6	263	8 3 6
	Protected	311	5,785	973 0 0	55	402 8 0	450	44	59 5 9	..	....	.....	82,900	207 4 0	2,043	127 11 0	111,671	278 3 6	419	13 1 6
	Total	1,538	35,406	5,030 10 0	230	665 6 0	673	513	120 14 3	..	....	.....	374,400	936 0 0	6,615	413 7 0	295,680	724 8 0	682	21 5 0
	Foreign	1,081	24,465	.....	37	.....	..	....	.....	..	....	.....	302,692	.....	1,966	.....	933	.....	....	.....
	Private	239	3,327	.....	..	.....	160	....	.....	..	....	.....	644,170	.....	873	.....	88,326	.....	50	.....
	Total	1,320	27,792	.....	37	.....	160	....	.....	..	....	.....	947,862	.....	2,839	.....	89,259	.....	50	.....
Kanaigha.	Government District Forests	511	20,328	1,363 14 0	..	.....	85	306	124 7 9	45	594	151 10 6	13,485	33 1 6	199	12 7 0	2,480	2 7 6	11,669	364 10 6
	Foreign	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	....	.....	.....	.....	....	.....
	Private	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	....	.....	.....	.....	....	.....
	Total	511	20,328	1,363 14 0	..	.....	85	306	124 7 9	45	594	151 10 6	13,485	33 11 6	199	12 7 0	2,480	2 7 6	11,669	364 10 6
South Sylhet.	Government District Forests	..	....	.....	..	.....	3	111	22 8 0	..	....	.....	2,000	5 0 0	....	.....	8,200	20 8 0	....	.....
	Foreign	122	....	.....	..	.....	..	....	.....	..	....	.....	617,390	.....	1,645	.....	71,588	.....	....	.....
	Private	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	....	.....	.....	.....	....	.....
	Total	122	...	.....	..	.....	3	111	22 8 0	..	....	.....	619,390	5 0 0	1,645	.....	79,788	20 8 0	....	.....
Habiganj.	Government District Forests	1	126	7 14 0	..	.....	..	....	.....	..	....	.....	14,400	36 0 0	...	.....	175	0 7 0	....	.....
	Foreign	772	....	.....	..	.....	.	....	.....	..		.....	2,128,825	.....	5,041	.....	23,080	.....	816	.....
	Private	..	....	.....	..	.....	..	....	.....	..	....	.....	.....	.....	....	.....	.....	.....	....	.....
	Total	773	126	7 14 0	..	.....	..	....	.....	..	....	.....	2,113,225	36 0 0	5,041	.....	23,255	6 7 0	816	.....
	Grand Total	4,264	83,653	6,402 6 0	267	665 6 0	921	930	267 14 0	45	594	151 10 6	4,098,362	1,010 11 6	16,339	425 14 0	440,462	747 14 6	14,217	385 15 6

Appendix XVI.

Statement showing the Forest Produce exported viâ *Diyangmukh and registered at that Station during each month in the year 1886-87.*

Months.	Dugouts.		Posts.		Oars.		Planks.		Pirahs.		Chariahs.		Rice pounders.		Total.	
	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.
		Rs. As.		Rs. As.		Rs. As.		Rs. As.								Rs. As.
April 1886	8	232 0	45	12 12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	244 12
May "	3	81 8	4	4 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85 8
June "	4	94 0	39	36 4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	130 4
July "	19	808 0	169	145 4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	953 4
August "	19	1,069 0	4	2 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,071 0
September "	11	325 8	196	312 0	3	0 3	.....	.....	.....	.....	.....	.....	.....	.....	.....	637 11
October "	2	182 0	133	98 7	44	20 0	3	1 8	.....	.....	.....	.....	.....	.....	.....	301 15
November "	8	236 0	39	64 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	300 0
December "	5	116 8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	116 8
January 1887	4	128 0	15	11 9	6	4 8	20	6 4	.....	.....	10	4 6	.....	.....	.....	154 11
February "	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March "	15	339 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	339 0
Total	98	3,611 8	644	686 4	53	24 11	23	7 12	.....	.....	10	4 6	.....	.....	.....	4,334 9

Appendix XVII.

1	2		3		4		5		6		7		8		9		10		11		12		13	
Division.	Royalty on forest produce.		Garkati.		Revenue from forests not managed by Government.		Miscellaneous		Revenue realised by mauzadars.		Total revenue realised by the Forest Department.		Revenue realised by tahsildars.		Value of timber on lands taken up for cultivation		Rubber.		Cassia mahal.		Lac-mahál.		Total revenue realised by the Revenue Department	
	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs	Rs	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs	Rs.	Rs.
Direction	.....	.....	...	...	...	...	12	33	...	...	12	33	...	...	.....	.....	...	...	...	...	...	...	.....	.....
Gáro Hills	7,787	7,893	8,836	7,264	683	587	983	507	524	504	18,813	16,755	...	...	.....	.....	...	...	...	...	...	...	.....	.....
Goálpára	15,523	16,657	...	...	24	113	874	996	480	674	16,901	18,440	...	...	.....	.....	...	...	...	9	22	...	22	9
Kámrúp	19,049	27,442	...	...	...	7,375	882	1,847	258	5.	20,189	36,719	1,094	242	979	.....	...	..	...	...	...	...	2,073	242
Darrang	2,690	1,840	...	...	...	...	125	163	1,541	2,237	4,356	4,240	162	73	4,698	2,837	22,100	22,100	...	...	56	...	27,006	25,010
Nowgong	2,220	2,215	...	...	...	...	...	...	1,565	3,006	3,785	5,221	...	...	9	.....	128	88	...	...	249	199	386	287
Sibságar.....	5,263	6,402	...	...	...	...	606	1,028	5,027	789	10,896	8,219	...	...	9,057	548	...	...	...	...	72	21	9,129	569
Lakhimpur	4,815	5,995	...	...	...	...	643	660	3,856	6,870	9,314	13,525	...	...	1,726	1,459	7,000	12,267	...	...	12	12	8,738	13,738
Cachar	30,456	36.193	...	...	5,253	1,404	683	4.068	...	...	36,392	41,665	33	862	2,408	1,402	1,850	500	...	...	...	...	4,291	2,764
Sylhet..... ...	16,221	18.699	...	...	...	...	402	29	...		16,623	18,728	...	...	514	834	...	250	...	...	...	...	514	1,084
Khasi and Jaintia Hills.	2,342	3,200	...	...	4,312	1,024	38	64	...		6,692	4 288	...	...	.....	.....	350	350	170	125	...	...	520	475
Nága Hills	4	.....	...	...	...	...	...	...	...	...	4	.....	...	...	.....	.....	...	...	...	...	...	...	.....	.....
Total	1,[illegible]6,370	1,26,536	8,836	7,264	10,272	10,503	5,248	9,395	13,251	14 13[illegible]	1,43,977	1,67 8[illegible]3	1,289	1,177	19,331	7,080	31,428	35,55[illegible]	170	134	411	232	52,679	44,178

Resolution on the Assam Forest Report for 1886-87.

Extract from the Proceedings of the Chief Commissioner of Assam in the Revenue Department, No. 3,041, dated the 30th August 1887.

READ—

The Report on Forest Administration in Assam during 1886-87.

RESOLUTION.

THIS report bears date the 20th June, and was completed by the Conservator, Mr. Gustav Mann, before proceeding on privilege leave. It reached the Secretariat in print on the 3rd August. This is a great improvement upon last year, when the report was not submitted till the 6th August, and not printed till the 20th October. It was then stated that a much earlier date of submission could not be fixed, as the financial details on which the report is based are furnished by the Assistant-Comptroller-General, and the report cannot be commenced till they are received. Mr. Ward is glad to observe that this year it was found practicable to obtain the statements of the Accounts Department (Forms 58 to 61), which last year were dated 5th July, as early as the 2nd June.

Total area of forests.

2. The statement below exhibits the changes which took place during the year in the area of forest lands in Assam:—

Class of forests.	Area in square miles.			
	At the beginning of the year.	Added.	Excluded.	At end of year.
Reserved forests	2,332	375	...	2,707
Protected "	863	555	193	1,225
Unclassed State forests and waste lands.	6,392	13	278	6,127
Total ...	9,587	943	471	10,059

Reserved forests.

3. Fair progress has been made during the year with the settlement of reserves. The 375 square miles added to the reserved area lie in the Gáro Hills, Goálpára, Nowgong, Lakhimpur, and Sylhet districts; the most considerable addition was in the last, where the Langai and Singla forest, aggregating 170 square miles, which has for many years been a protected forest, was finally gazetted a reserve. Since the close of the year five more forests, three in the Nága Hills district, aggregating 200 square miles, and two in the Lakhimpur district, aggregating 24 square miles, have been added to the reserves, which now extend over 2,931 square miles. Nine other forests in the Lakhimpur, Sibságar, Darrang, and Nowgong districts, covering 422 square miles, are under settlement. When these operations are complete, Assam will have an area of reserved forests amounting to 3,353 square miles, or 570 square miles more than that which Sir Dietrich Brandis, in his "Suggestions regarding Forest Administration in Assam," drawn up in 1879, contemplated as sufficient. Those suggestions took no account of the Gáro Hills, where Government now possesses 120 square miles of reserved forest; in Goálpára the reserves are 127 square miles, in Kámrúp 40 square miles, and in Nowgong they will shortly be 102 square miles, more extensive than Sir Dietrich Brandis anticipated. The only district where reservation has much fallen short of his expectations is Lakhimpur, where only 45 square miles have yet been constituted reserves, and proposals have been made for reserving another 209 square miles.

The Chief Commissioner considers that, in view of the present limited demand for the produce of State forests in Assam, this, with a few additions which have since been proposed, is as large an area of reserved forest as it will be necessary to maintain for many years to come. The operations of forest conservancy must be restricted by the possible income from the forests; and to burden the department with the protection of extensive tracts, where there is as yet no market for forest produce, would result in an expenditure altogether beyond the resources of the Province.

The Rules drawn up for the guidance of forest settlement officers by the Inspector-General of Forests, which have recently been circulated for observance by the Chief

Commissioner, should result in greater method and expedition than has been shown in the past in disposing of the preliminaries to settlement. In this Province, where in almost the whole of the forest area no rights adverse to Government exist, forest settlement is generally an exceedingly simple business; and Mr. Ward hopes that in his next report the Conservator may be able to announce that all the nine areas remaining for settlement (especially those in Lakhimpur, which were gazetted three years ago) have been duly constituted reserved forests.

Protected and unclassed forests.

4. The decrease in the area of protected forests is due to the constitution of the Langai and Singla forest and some forests in Lakhimpur as reserves, and the surrender of a small portion for cultivation; the additions to the area were caused by the notification of six hilly tracts in the south of Sylhet, aggregating 247 square miles, as protected forests, and the correction of an error of calculation in the area of forest brought under protection in North Cachar, which is not a real increase. The true net increment of the year under this head is 54 square miles. The changes shown in the area of unclassed forest and waste lands (the total of which is necessarily only an approximation) are accounted for by the land constituted reserved or protected forest, or given up for cultivation, and that surrendered from former reserves or protected tracts.

Boundary work.

5. The following statement shows the work done during the year in clearing boundary-lines, inspecting boundaries, and repairing boundary-marks in each forest division:—

Forest division.	Total length of boundary marks. (Miles.)	Total length cleared. (Miles.)	Total length inspected by divisional officer. (Miles.)	No. of boundary-marks.	Number repaired.
Gáro Hills	130	130	81	176	176
Goálpára	97	97	97	391	291
Kámrúp	381	379	298	1,757	1,757
Darrang	29	29	11	193	89
Nowgong	72	70	66	628	585
Sibságar	139	87	87	268	129
Lakhimpur	131	88	87	1,076	1,023
Cachar	68	66	65	624	624

This statement, which is abstracted from Appendix II. annexed to the report, does not include Sylhet, the Nága, or the Khási and Jaintia Hills. The absence from it of these districts requires explanation, and in future they should be included. The first has a separate Forest Officer in charge, and the second is included in the Sibságar division. The forests in the third are in charge of the district officers.

The only serious failure shown by the above figures is in the Sibságar division, where it is explained that the money allotted for clearing and boundary work was expended before half was accomplished. In the Gáro Hills the boundaries not inspected by the divisional officer were gone over by the Sub-Assistant-Conservator. In Kámrúp Mr. Mein was hindered by illness from going over all the lines himself, but they were inspected by the forest-ranger. In Darrang the district officer was incapacitated by an accident for three months. In Lakhimpur, 41 miles of line have been ordered by the Conservator to be cleared only once in three years.

Surveys and working plans.

6. The forest surveys of the year were, as in 1885-86, concentrated in the Gáro Hills, the work there being, from December 1886, in charge of a special trained forest officer from England. Four reserves in this division were surveyed, one of which was begun in 1885-86 and finished in 1886-87; a second was begun and finished in the latter year, and in the remaining two a traverse survey was made and some interior topographical details filled in. The cost of the completed work in the first two was Rs. 446 and Rs. 650 per square mile respectively. A working plan is under preparation for the Dambu forest, that first surveyed. Much money has been spent upon the scientific treatment of this forest, and on the construction of a cart-road from the plains to afford an exit for its timber, and the Chief Commissioner hopes that the eventual results will justify the expenditure.

Fire-protection.

7. Fire-protection has again been very successful. The Report omits to notice how far this was due to the character of the season, which during the dangerous months, January to March 1887, was rather unusually rainy. In the four plains divisions to which protection extended, Goálpára, Kámrúp, Darrang, and Nowgong, an average of 5·16 inches of rain fell in

these months, against 1·58 inches in the the previous year. The following statement shows the area brought under protective operations, as compared with 1885-86 :—

Year.	Area attempted.	Failures.	Area protected.	Proportion of failure.	Cost. Per square mile protected.	Cost. Per acre protected.	Proportion under fire-protection to total area of reserves.
	Square miles.	Square miles.	Square miles.	Per cent.	Rs.	Pies.	Per cent.
1886-87	278	3	275	1	34	10	10
1885-86	234	7	227	3	39	12	10
Increase or decrease in 1886-87.	+44	−4	+48	−2	−5	−2	.....

Although the area protected is but 10 per cent. of the reserved area (the increase in the protected area in 1886-87 being balanced by that in the reserves), there are 1,802 square miles of reserves (out of a total of 2,707) which require no protection from fire, being evergreen forest. Thus, only 627 square miles of reserves, or 23 per cent. of the entire area, which would be improved by protection, did not receive it. It is noticed that fire-protection is not carried out in the valuable *Sâl* forests in the Gáro Hills. The Chief Commissioner would be glad to learn how they fare when thus left to themselves.

Forest offences.

8. There were 113 prosecutions for breach of forest rules, against 51 in 1885-86. 103 cases were disposed of, in which 286 persons were concerned, of whom 225, or 78 per cent., were convicted. The number of cases compounded has fallen from 79 in the previous year to 50, which resulted in the levy of Rs. 1,374 in fines. These figures are not large, considering the area of the forests.

Plantations.

9. The only plantations of importance in the Province are those of rubber-trees in Darrang and Kámrúp, and out of a total expenditure during the year of Rs. 5,388, Rs. 4,395 were spent on them. Want of funds prevented any extension during 1886-87. The Government of India, in their orders on last year's report, asked for a detailed statement of the whole cost of each rubber plantation, and an estimate of its probable cost of maintenance, exploitation, and income in the future. An estimate of expenditure has been prepared by Mr. Mann, and shows that the two plantations in Darrang, which aggregate 1,051 acres, have cost in the past a total sum of Rs. 83,850, and that in Kámrúp (area 148 acres), Rs. 14,885. The cost of future maintenance of the existing areas will decrease annually as the trees grow older and require less attention; the expenditure during the next 20 years (exclusive of extensions) is estimated at Rs. 35,450. As regards the probable income, no sufficient data as yet exist for a trustworthy estimate. The plantations date only from 1873-74, and thus none of the trees have yet attained an age to be fit for tapping. The experimental tappings which have been made of self-sown trees in the forests have been systematically carried on only for four years, and the results are so far inadequate as a basis for induction. The Chief Commissioner, however, sees no reason to doubt that the plantations will eventually prove remunerative to Government.

The plan of endeavouring to induce *jhúm* cultivators to plant up abandoned *jhúms* with valuable timber trees on quitting them for fresh sites, which is found to succeed in Burma, has hitherto proved a failure in Assam. The *jhúmers*, having abundance of land to cultivate elsewhere, have no inducement to enter the reserves (where alone the method could be a success) for the purpose.

Roads and buildings.

10. Roads and buildings cost Rs. 11,780 during the year, against Rs. 28,350 in 1885-86. The department was relieved of the heavy expenditure on the Dambu cart-road in the Gáro Hills, which cost about Rs. 24,000 to complete in the two previous years. As, however, the road is used only for the extraction of timber from the forests, and is not otherwise specially beneficial to the district, the Chief Commissioner has, during the current year, decided that it must be maintained by the Forest, and not by the Public Works, Department of the Province. The rest of the expenditure on roads, and the whole of that on buildings, was devoted to ordinary repairs. Most of the forests in the Province are served by district roads, and water

carriage plays an important part in the transport of timber. The departmental buildings are the houses of forest officers at the head-quarters of their divisions, and inspection huts in the forests under their charge.

Yield of forests.

11. The following statement exhibits the outturn of the Government forests in Assam in timber, fuel, and bamboos during the year :—

Class of forest.	Timber, selection fellings. Cubic feet.	Firewood and charcoal. Cubic feet.	Bamboos. No.
Reserved forests.			
By Government agency ...	637	.....	5,204
„ purchasers	678,523	26,245	858,504
Free grants	21,530	65,961	81,550
Total	700,690	92,206	945,258
Protected forests.			
By Government agency ...	.....	.....	.....
„ purchasers	45,847	140	100,250
Free grants	4,160	47,400	463,320
Total	50,007	47,540	563,570
Unclassed forests and waste lands.			
By Government agency ...	29,804	8,200	.....
„ purchasers	426,446	132,532	154,409
Free grants	351,633	178,434	199,793
Total	807,883	319,166	354,202
Total.			
By Government agency ..	30,441	8,200	5,204
„ purchasers	1,150,816	158,917	1,113,163
Free grants	377,323	291,795	744,663
Grand Total	1,558,580	458,912	1,863,030
Grand Total, 1885-86 ...	1,198,974	419,666	2,405,384
Increase or decrease in 1886-87	+359,606	+39,246	−542,354

There is a considerable increase in the outturn of timber, the purchases in the reserved forests being double the amount of last year. The increase under fuel is not large; the chief demand for fuel is on the part of tea-planters, and among them the use of Makum coal and coke is steadily extending.

Last year the Government of India commented on the large proportion of the outturn shown in the above statement which is the subject of free grants. The proportion is this year much smaller, and when the matter is further enquired into, it is seen that in point of value the forest produce granted free is far inferior to that sold. Forms 54 and 55 give the total value of free grants of timber and forest produce as Rs. 58,681. Of this, Rs. 5,560 represents the value of trees granted free to the Assam Railways and Trading Company under their contract with Government; Rs. 4,952 is shown by Appendix XII. to have been granted departmentally in exchange for the assistance given by villagers in Kámrúp and Nowgong in clearing boundaries and protecting the forests from fire free of other charge; and only the balance, Rs. 48,169, is the amount of royalty foregone without consideration by the Forest Department in favour of private persons using forest produce, the property of Government.

The increase under timber is largely due to the extraction of nearly double the the quantity of *Sâl* exported last year, which the Conservator looks upon as a sign of the revival of the timber trade. This wood is supplied by the Gáro Hills, Goálpára, and Kámrúp divisions, and upon the demand for it the solvency of the Forest Department in Assam largely depends. In Cachar and Sylhet the demand for timber and forest produce for sale shows, and has always shown, a steady increase.

The outturn of the year in minor forest produce does not admit of being exhibited quantitatively as in the statement above. Government received from this source Rs. 53,330, against Rs. 45,752 in the previous year. The chief items were rubber *mahâls*, Rs. 34,938; canes, which brought in Rs. 6,432; and passes for gathering minor produce in the Gáro Hills, Rs. 7,621.

Financial results.

12. The total receipts and expenditure of the year are compared below with those of 1885-86:—

RECEIPTS.

		1885-86.	1886-87.	Increase or decrease.
		Rs.	Rs.	Rs.
I.	Departmental timber operations ...	596	386	—210
II.	Produce removed by consumers and purchasers.	1,79,227	1,83,060	+3,833
III.	Drift and waif wood ...	1,317	2,225	+908
IV.	Forests not managed by Government	10,271	10,628	+357
V.	Miscellaneous	5,246	15,711	+10,465
	Total	1,96,657	2,12,011	+15,354

EXPENDITURE.

A.—Conservancy and Works.

I.	Departmental timber operations ...	1,538	2,686	+1,148
II.	Produce removed by purchasers ...	6,595	6,104	—491
III.	Drift and waif wood	63	79	+16
VI.	Live stock, tools and plant ...	11,297	12,940	+1,643
VII.	Roads and buildings	28,350	11,780	—16,570
VIII.	Demarcation, surveys, working plans, plantation, fire-protection, and other works.	39,502	40,291	+789
IX.	Miscellaneous	5,139	5,287	+148
	Total A ...	92,485	79,168	—13,317

B.—Establishments.

I.	Salaries	95,878	1,06,124	+10,246
II.	Travelling allowance	18,178	22,697	+4,519
III.	Contingencies	4,952	4,298	—654
	Total B ...	1,19,008	1,33,119	+14,111
	Grand Total ...	2,11,493	2,12,287	+794
	Deficit ...	14,836	276	—14,560

Receipts.

13. The receipts of the year are larger than they have been since 1882-83, the most prosperous year in the history of the Forest Department in Assam. Heads I. and III. are of little practical importance. Head IV. represents the receipts from duty on timber imported into the Province (an item which will increase now that the Government of India have authorised duty to be levied on foreign timber imported into the Assam Valley) and the proceeds of shared forests in the Native States of the Khási Hills. Under Head V. there has been some difference in account-keeping in different years; it represents chiefly pass fees on timber taken down by river in the Surma Valley, and these have been sometimes shown under head II.

The bulk of the revenue of the department has always been derived from the second head, "Timber, &c., removed by consumers and purchasers," and these receipts make up 86 per cent. of the income of 1886-87. They exceed those of 1885-86 by Rs. 3,833, and those of 1884-85 by Rs. 11,169. On the other head, they are Rs. 14,216 below the receipts of 1883-84 and Rs. 37,257 below those of 1882-83. An examination of their details during the past five years shows a steady growth in forest revenue* under this head in the Surma Valley, while in the Brahmaputra Valley there have been great fluctuations, but, on the whole, a considerable decrease in all subsequent years compared with 1882-83. This is due chiefly to two causes: first, and mainly, the failure of the timber trade with Bengal, upon which the revenue of the Gáro Hills, Goálpára,

	Rs.
* 1882-83	27,178
1883-84	35,889
1884-85	44,303
1885-86	51,151
1886-87	58,328

and Kámrúp divisions almost entirely depends; and, secondly, the greatly diminished receipts of late years from land taken up for the extension of tea and other cultivation. Dr. Brandis, writing in 1879, found (paragraph 202 of his report) that these formed the chief income of the Forest Department as then managed, and calculated on a revenue for the whole Province of Rs. 70,000 a year from this source. The highest figure which has been reached under this head during the past five years in the Assam Valley is Rs. 15,479 in 1885-86, and in the year of report it fell to Rs. 4,844. Besides these receipts, the proceeds of the sale of rubber-*mahâls* are the chief item in the forest revenue of Upper Assam. It has been pretty constant during the last five years, averaging about Rs. 32,000 a year, but cannot be relied upon as a permanent source of income Upon the whole, it is evident that in the Assam Valley the forest income requires careful and assiduous management to enable the department to pay its way, and that its development depends upon the increase of population and consequent demand for forest produce within the Province, and a good market in the neighbouring districts of Bengal, neither of which factors are within the control of the department.

Expenditure

14. Turning now to the expenditure, the Chief Commissioner observes that it has steadily risen throughout the five years ending 1886-87, which are those of the last provincial contract, during which forest receipts and charges, previously Imperial, have been shared between the Province and the Government of India. The net result of the five years has been a surplus of only Rs. 56,265, and the last three years have shown a deficit. This is almost entirely due to the growth of charges under "B, Establishments," as will be seen from the comparative statement below :—

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.
A.—Conservancy and Works	75,929	90,642	94,739	92,485	79,168
B.—Establishments	95,894	1,08,920	1,02,960	1,19,008	1,33,119
Total	1,71,823	1,99,562	1,97,699	2,11,493	2,12,287

The increase under "A—Conservancy and Works" in the three years 1883-84 to 1885-86 is accounted for chiefly by expenditure on roads and buildings, notably on the Dambu forest road in the Gáro Hills, and on the purchase of elephants to replace those lost by death; under other heads the fluctuations have been small. The increase in establishments is due to an increase in the forest controlling and subordinate staff, and a rise in salaries caused by departmental promotion. On the 1st April 1882 there were eight officers in charge of forest divisions. On the 1st April 1887 there were eleven. Only one of the eight has left the Province, and every one of the remaining seven, as well as Mr. Mann himself, has received departmental promotion. The three additional charges which have been created are the Sylhet and Nowgong divisions, and that of Surveys and Working Plans. The forest staff has now, so far as its number is concerned, reached its limit; but departmental promotions will continue to increase its cost until the sanctioned scale is worked up to. These promotions cannot be refused, and they are, therefore, altogether out of the Chief Commissioner's control. Mr. Ward trusts, however, that the Conservator will watch jealously over the increase of expenditure under subordinate establishments, and will use all his efforts to maintain at least an equilibrium between receipts and expenditure. The deficit this year is small, and might have been converted into a surplus, but for the necessity of allowing wood-cutters in the lower districts of the Assam Valley to pay part of the price of trees felled by them after sale of the timber. The budget of the current year anticipates a surplus of Rs. 20,000, which the Chief Commissioner hopes may be secured.

By order of the Chief Commissioner of Assam,

C. J. LYALL,

Secretary to the Chief Commissioner of Assam.

A. S. Press (Revenue) No 77—500—31-8-87.

No. 1026F., dated Simla, 27th October 1887.

From—SIR E. C. BUCK, Secretary to the Government of India, Revenue and Agricultural Department,

To—The Chief Commissioner of Assam.

I AM directed to acknowledge the receipt of your letter No. 3053, dated the 31st August last, forwarding the Progress Report of Forest Administration in Assam for the year 1886-87, together with your Resolution thereon. Your letter was received by the Government of India on the 7th September.

2. It is observed that substantial progress has been made in the gazetting of forests under the Indian Forest Act, 375 square miles of Protected and Unclassed State Forests having been declared Reserves under Chapter II, and 247 square miles formed into Protected Forests under Chapter IV. The table given in paragraph 24 of the Conservator's Report, shows that, on the conclusion of the Forest Settlements which were in progress at the close of the year, the area of Reserved Forests in Assam will amount to 3,354 square miles, or 7 per cent. of the total area of the Province. You consider that the Rules drawn up by the Inspector General of Forests for the guidance of Forest Settlement Officers, and recently circulated, are likely to result in greater method and expedition than has hitherto been shown in disposing of the preliminaries to Settlement. With reference to the form of Register of Reserves given in Appendix I, I am to suggest that when temporary privileges are granted in Reserved Forests under your executive orders, it may be desirable to fix a limit to the period during which they are to be conceded; the period, of course, admits of extension, but the mention of it at once implies the temporary nature of the concession.

3. From the Conservator's Report, it is seen that the survey of the Dambu Forest has cost Rs. 446 per square mile, while that of the Darugiri Reserve reached the high figure of Rs. 650 per square mile. The traverse survey, with some interior topographical detail, of the Rongrengiri Reserve cost Rs. 175 per square mile, and Rs. 156 per square mile were expended on the partial survey of the Songsak Reserve. It is not stated whether the above figures include the pay and travelling allowance of the supervising officer, and I am to request that this information may be furnished, together with a statement showing the nature of the charges debited against the work. It appears that a complete topographical survey has not been made of these four forests, the total area of which is 39 square miles. The cost of this work, which apparently does not include the preparation of the maps, seems, notwithstanding the climatic and other disadvantages under which it is conducted, to be very high; and I am to suggest for your consideration whether Forest Survey work, except such as is of a petty nature, would not be more conveniently in future conducted in communication with, and under the direction of, the Superintendent of Forest Surveys. This course would, it is believed, not only result in a considerable reduction in the cost of such work, but would also ensure its quality being such as to render it of permanent value.

4. The Working-Plans Division was employed in the Dambu Forest, within which arrangements have been made to record, every second year, the rate of growth of the trees on five sample areas. You express a hope that events will justify the expenditure incurred on the scientific treatment of this forest. In connection with what has been said above, I am to remark that it is too heavily burdened with the expenditure incurred on a survey costing at least Rs. 446 per square mile, exclusive of the preparation of maps.

5. The number of forest cases taken into Court has more than doubled; but the Conservator reports that the offences were all of a petty nature, and their number appears still to be moderate.

6. Notwithstanding that the season was favourable, the result of the operations undertaken for the protection of forests from fire may be considered satisfactory; but the rates per square mile appear to be still high, as compared with those paid in other Provinces having a climate similar to that of Assam. The difference between the rates for the several Divisions seems to call for some

explanation. The system instituted by the Conservator, under which the areas burnt each year are indicated on a map, and a record of the damage done is made, appears to be an excellent one. The total area of the Reserves is 2,707 square miles, of which 1,802 square miles are evergreen forests, not liable to be burnt, and 905 square miles are in danger from fires. But only 278 square miles, or 31 per cent., of these forests are actually under protection; and I am to suggest for your consideration whether the area to which special measures of preservation are applied could not be increased, by the protection, for instance, of the valuable sál forests in the Garo Hills.

7. The Conservator remarks that, in the mixed forests, the regeneration of the more valuable kinds of trees might be much facilitated by the removal of inferior species, but that such work cannot, on financial grounds, be undertaken at present. In this connection I am to say that it seems desirable to try the effect of such improvement cuttings over limited areas. Experiments of this kind could probably be carried out on a sufficiently large scale to give most valuable results at a very moderate cost.

8. The remarks made by the Conservator, and also those contained in your Resolution, on the subject of the Rubber Plantations of Assam have been perused with interest. The plantations in Darrang and Kamrup have, since they were formed in 1873-74, cost on an average Rs. 82 per acre. Mr. Mann calculates that the total cost up to the age of 25 years, when light tapping may be commenced, will be Rs. 195 per acre. An accurate record of the cost of these plantations will doubtless be maintained. You see no reason to doubt that they will ultimately prove remunerative, notwithstanding that sufficient data are not at present available upon which a trustworthy estimate of their financial results can be based. The importance of cutting creepers in the Reserves will probably not be lost sight of.

9. It is observed that as the Dambu cart-road is at present used solely for the extraction of timber, you have decided that it must be maintained by the Forest, and not by the Public Works, Department. The road will, however, doubtless be the means of opening up the country, and will prove beneficial in other ways. With reference to the Conservator's remark regarding the difficulty of obtaining carts in this locality, at reasonable rates, I am to suggest for your consideration whether, should the demand on these forests increase, it will not be desirable to construct a tramway, the rails of which could probably be laid upon the newly constructed road at a moderate cost.

10. The decline in the export of rubber is attributed to the severe tapping to which the trees have been subjected, during the last few years, in the North-Cachar and Naga Hills Divisions. The fluctuation in the yield of rubber trees engages the attention of the Forest Department.

11. Efforts are being made to ensure more circumspection when granting forest produce free, and the amount which it was found necessary to grant in this manner during the year was much less than formerly. This favourable result appears to have been attained without any inconvenience being imposed on the people. The total value of free-grants during the year is estimated at Rs. 58,681, of which sum, Rs. 48,169 represent the produce given by the Department to private persons, without consideration. It is satisfactory that the owners of private forests have begun to appreciate the value of their property, and to introduce a more careful and rational system of working them.

12. There was a deficit of Rs. 276, as compared with Rs. 14,838 during the previous year. It is understood that the Receipts would have been larger had it not been found necessary to permit the felling of trees in the Goalpara and Kamrup Divisions without immediate payment of their full price. I am to remark that Rs. 320 only were received as grazing dues, and that the sale of firewood and charcoal produced only Rs. 2,037. The Assam Forest Department appears to depend mainly on foreign markets, and so long as this continues to be the case, its financial position will remain unfavourable. It is observed with satisfaction that your attention is directed to the question whether local markets cannot be stimulated or improved, and that you fully appreciate the fact that the forest income requires careful and assiduous management to enable the Department to pay its way.

Appendix showing a discrepancy noticed in the Forms appended to the Report of Forest Administration in Assam for 1886-87.

FORM NO. 52.

(Plantations.)

The area of Regular Plantations, and the grand total area, on 1st April 1886, are given as 1,389 and 1,495 acres, respectively; whereas in the previous year's Report, the area of Regular Plantations on the 31st March 1886, was entered as 1,391 acres, and the grand total area as 1,497 acres.

G. C. Press, Simla.—No 614 R & A. D—3-11-87—210